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1 GUADALUPE WEST PLANNING STUDY

Preliminary Assessment

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City of Santa Clara, California

SEDWAY/COOKE
AND ASSOCIATED CONSULTANTS

1 GUADALUPE WEST PLANNING STUDY

Preliminary Assessment

Prepared for

THE CITY OF SANTA CLARA

Prepared By

SEDWAY/COOKE

Urban and Environmental Planners and Designers

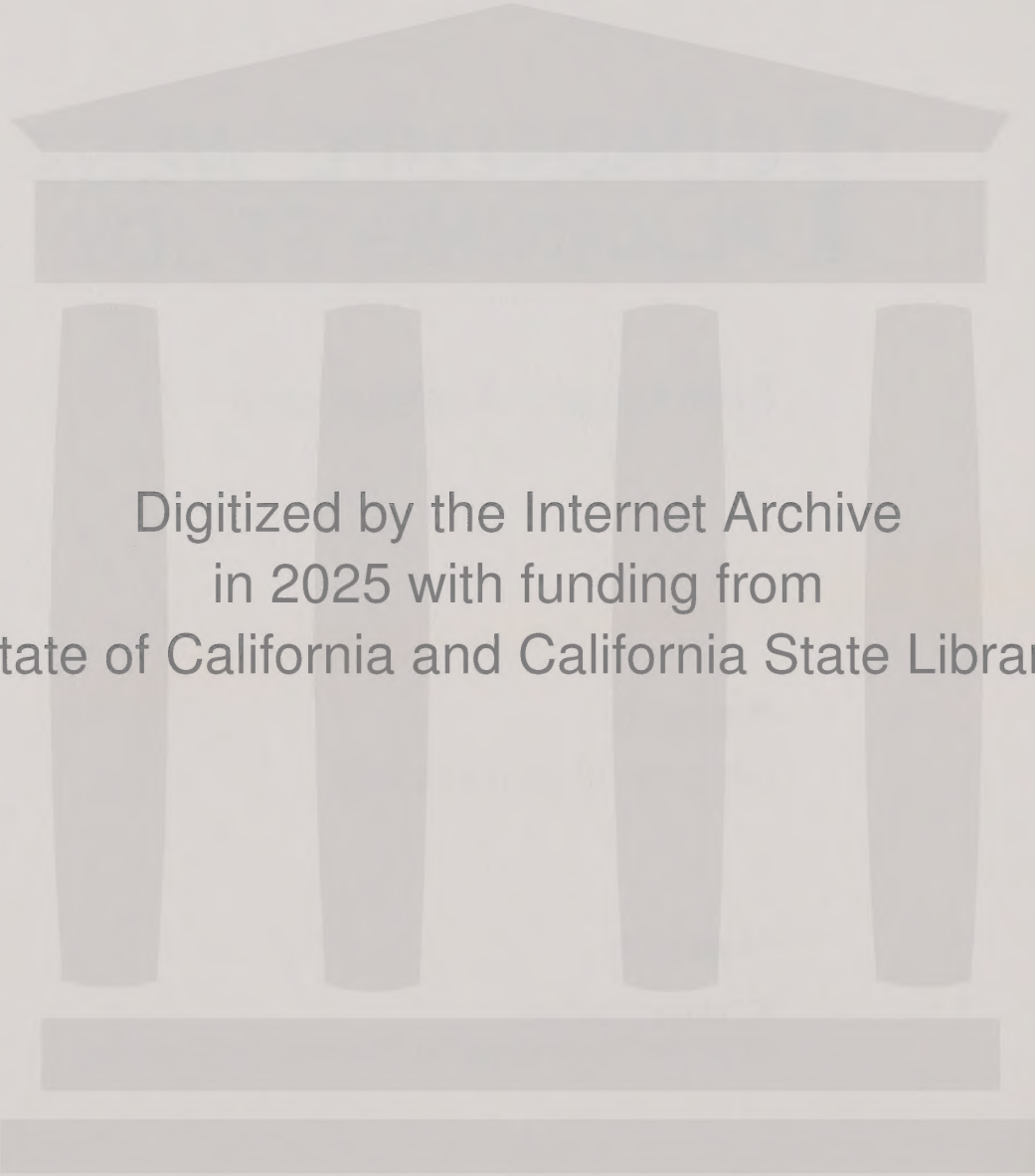
In Association with

ECONOMIC RESEARCH ASSOCIATES

MARK THOMAS & COMPANY

ROBERT CONRADT

January, 1981



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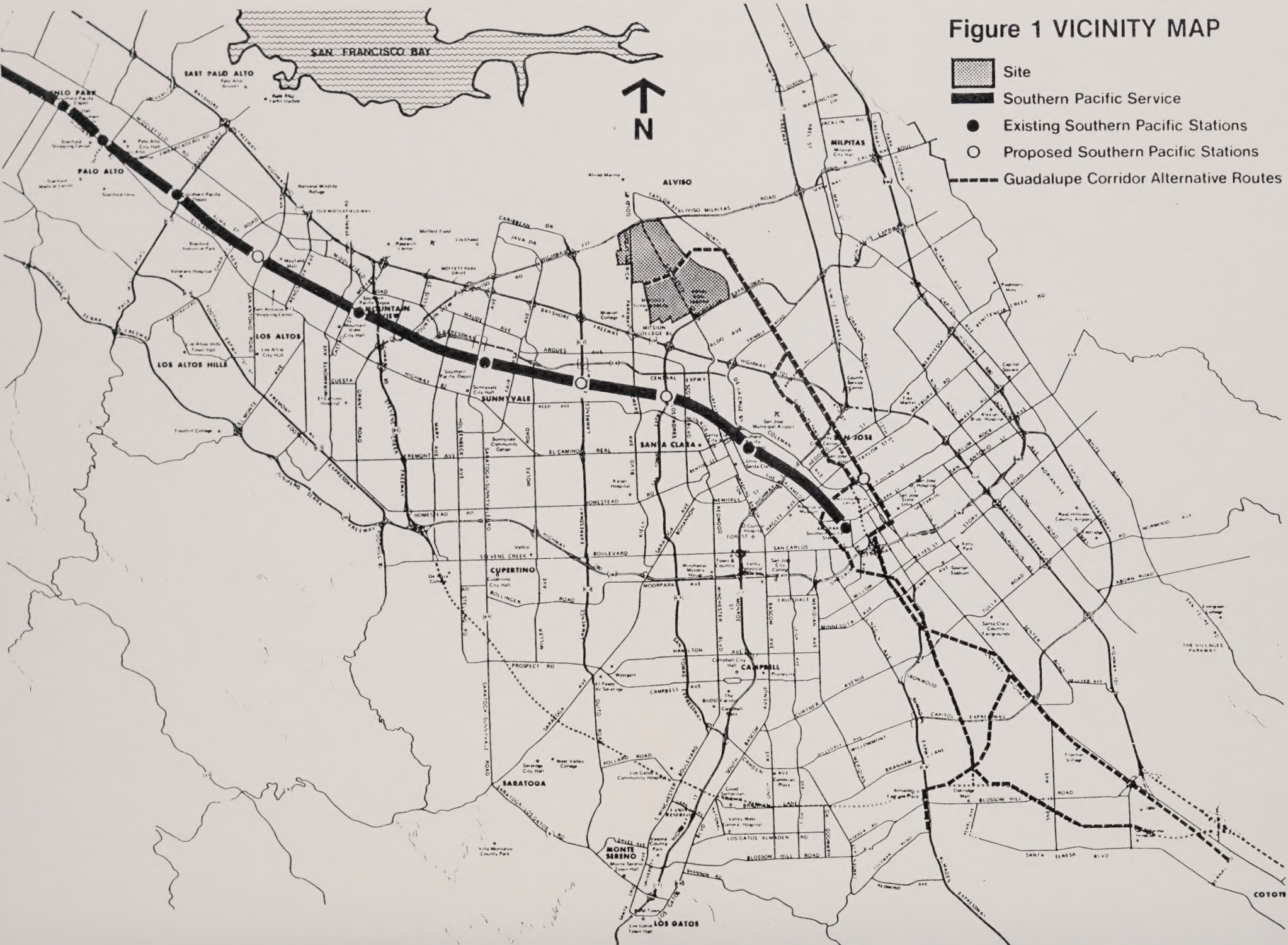
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Figure 1 VICINITY MAP

-  Site
-  Southern Pacific Service
-  Existing Southern Pacific Stations
-  Proposed Southern Pacific Stations
-  Guadalupe Corridor Alternative Routes



I. INTRODUCTION

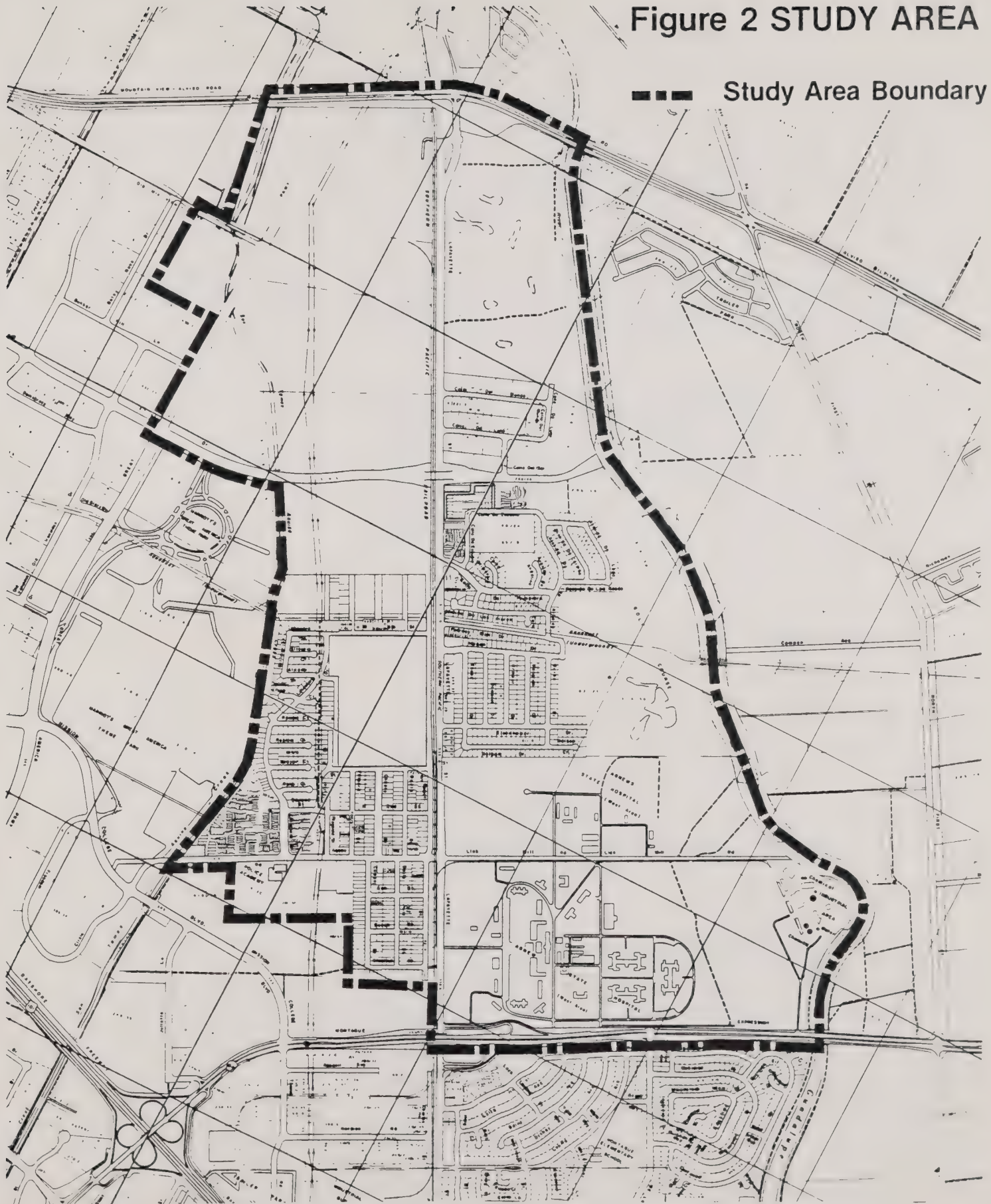
The City of Santa Clara has undertaken an evaluation of the 1433 acre Guadalupe West site to determine appropriate future uses. A planning and design team headed by Sedway/Cooke, Urban and Environmental Planners and Designers, and assisted by Economic Research Associates; Mark Thomas and Company, soil engineers and geologists; and Robert Conradt, traffic engineer, have completed the initial analysis phase of the nine-month study. This report summarizes the initial phase which consisted of an analysis of conditions within the study area and its vicinity. Based on this analysis, community development opportunities, constraints and conditions that will require careful integration with future uses and development are identified. This analysis will be used as a foundation for identifying development alternatives in Phase II.

The Guadalupe West study area encompasses land on the northeastern edge of the City, bordered on the north by Alviso-Milpitas Road (Highway 237), on the east by the Guadalupe River, on the South by the Montague Expressway, and on the west by Great America Parkway and Great America. Of the total acreage approximately 388 acres are undeveloped. Of that undeveloped land 218 acres are owned by the City, 70 by the state of California, and the remainder by private interests. 145 acres of City property are designated as landfill sites, intended to accommodate solid waste from the City of Santa Clara through 2000.

The site is located 3 miles from downtown Santa Clara and 4 miles from downtown San Jose. It is bisected from east to west by the currently proposed Guadalupe Corridor transit route, which is tentatively scheduled to run from Santa Teresa Blvd. and Bernal Road near IBM in south Santa Clara County to the junction of Great America Parkway and Tasman Drive. The corridor may be extended further north to the Lockheed facility and possibly rerouted to bypass the Guadalupe West site.

Figure 2 STUDY AREA

Study Area Boundary



II. ENVIRONMENTAL CHARACTERISTICS

This section focuses on the following environmental characteristics which will affect and/or be affected by development: geotechnical conditions; hydrology and water quality, including flooding characteristics, drainage, ground water and water quality; air quality; vegetation and wildlife; and noise.

Geotechnical Conditions

The study area is located within the Baylands area of Santa Clara County for which a policy plan was prepared in 1972. The following discussion is taken largely from that study.

Soils

The study area is classified on the Soil Conservation Service General Soil Map as group II, association 4, Sunnyvale - Castro - Clear Lake, and association 5, Orestimba - Willows. Group II soils are dominated by very deep level, somewhat poor to poorly drained soils. The composition of each association is as follows: 40 percent Sunnyvale, 25 percent Castro, 20 percent Clear Lake soils 5 percent Bayshore soils and 10 percent Willows soils; 50 percent Orestimba, 40 percent Willows, 5 percent Clear Lake, 3 percent Sunnyvale, and 2 percent Pacheco soils.

The majority of the study area consists of the Orestimba - Willows association; the eastern portion along the Guadalupe River consists of the Sunnyvale - Castro - Clear Lake association. The Orestimba - Willows soils have a high natural salt concentration. Both soil associations have high shrink-swell behavior, i.e. they are highly expansive. The effects of expansive soils on foundations must be addressed in the engineering design of structures but do not impose restrictions on the type of development. The usual solution to expansive soil problems is to place the foundation of structures on footings that extend to a depth where constant moisture conditions exist or to place the foundation slab on fill over the expansive soils.

Seismicity

The San Francisco Bay Area is within one of the most seismically active areas in the United States. The study area is near Hayward, San Andreas and Calaveras Faults, which are all historically active. The Silver Creek Fault, a potentially active fault, is located within one mile of the study area. Since 1900, more than 1900 earthquakes have been recorded in or near Santa Clara County, with an average of four to six events per decade of sufficient intensity to cause some structural damage. Four earthquakes of magnitude of 7+ have affected Santa Clara County within historic time.

Structures in the study area must be designed to take into account the possibility of a major earthquake (Richter magnitude 7.0 and greater with Modified Mercalli intensity of damage of IX or more).

Liquefaction

The Policy Plan for the Baylands of Santa Clara County identifies four risk zones for the Baylands based on the effect of subsurface conditions surface responses to static and seismic loading:

- Zone A in which surface effects of static and seismic loading will be insignificant;
- Zone B in which significant settlement may occur as a result of liquefaction of deeply buried granular layers in the alluvium;
- Zone C in which moderate to substantial settlement and/or differential settlement may occur as a result of Bay mud consolidation;
- Zone D in which substantial settlement and/or different settlement and ground failure may occur. Settlement may occur as a result of consolidation of sanitary landfill. Ground failure may occur under seismic loading as a result of lateral spreading toward a free face or by liquefaction of near surface granular layers.

The northwestern portion of the study area lies in Zone A. The south central portion of the study area which includes much of the Agnew State Hospital lies in Zone B. The northwestern portion of the study area as well as corridors along the San Tomas Aquino Creek and Guadalupe River are designated as Zone D based on the possibility of shallow liquefaction. Sanitary landfills are also designated as Zone D.

The risk zones identified by the Policy Plan for the Baylands are based on "sparsely distributed and inexact subsurface information, and, for this reason, are intended for general planning purposes only." The Baylands Policy Plan identifies appropriate land uses for each zone. Those uses are shown in Table I. The City of Santa Clara General Plan designates portions of the study area east of Lafayette as areas of high potential for liquefaction, lurching and lateral spreading as a result of a high water table. This is identified as a major geotechnical hazard and site investigations are mandatory prior to project approval.

According to the Draft Environmental Impact Report for the Lick Mill project, located in an area of the study area zoned D, there is a very low potential for liquefaction or lurching on the site. This conclusion is based on a geological

TABLE I
LAND AND BUILDING USES FOR VARIOUS RISK ZONES

LAND AND BUILDING USES ¹	RISK ZONES ²				RISK ZONES ³ (Under Special Conditions)			
	A	B	C	D	A	B	C	D
<u>GROUP A BUILDINGS</u>								
Hospitals and Nursing Homes	X							
Auditoriums and Theatres	X							
Schools	X							
Transportation and Airport	X							
Public and Private Office	X							
Major Utility	X							
Other Building Uses	X							
<u>GROUP B BUILDINGS</u>								
Residential-multiple units	X	X						
Residential- 1 and 2 family	X	X					X	
Small Commercial	X	X					X	
Small Public ⁴	X	X					X	
Small Schools - one story	X	X					X	
Utilities	X	X					X	
<u>GROUP C BUILDINGS</u>								
"Industrial Park" Commercial	X	X	X	X				
Light and Heavy Industry	X	X	X	X				
Small Public, if mandatory	X	X	X	X				
Airport Maintenance	X	X	X	X				
<u>GROUP D BUILDINGS</u>								
Water-oriented Industry	X	X	X	X				X
Wharves and Docks	X	X	X	X				X
Warehouses	X	X	X	X				X
<u>GROUP D OPEN SPACE</u>								
Agriculture, marinas, public and private open spaces, marshlands and saltponds, and small appurtenant buildings	X	X	X	X				

1. See the section "Summary of Risk Zones and Engineering Requirements" for additional requirements not noted in this table.
2. Risk Zones A, B, C, and D are described elsewhere in this report
3. Require special additional investigations, design and construction to allow the Land and Building Uses noted to be located in Risk Zones A, B, C, and D.
4. The term "public" is defined as owned or operated by an agency of government.

Note: The procedure for establishing risk zones and engineering requirements for each risk zone is shown on the flow chart, Figure 6, "Procedure for Determining Risk Zones and Engineering Requirements," of the Policy Plan for the Baylands of Santa Clara County.

investigation performed on the site by United Soil Engineering, Inc.

Two other engineering studies cited in the 1973 Environmental Impact Statement for Frontier Worlds Plan (now Marriott's Great America located west of the study area) reached the following conclusions.

- Tudor Engineering Company for the Santa Clara County Flood Control and Water District: the only apparent liquefaction zones identified were along the San Tomas Creek.
- Cooper-Clark and Associates for Frontier Worlds Company: Subsurface soil and ground water conditions were explored by drilling 60 borings and 4 probes to depths of 12 to 100 feet. From the borings it was found that granular deposits which could be susceptible to liquefaction are generally thin and localized, and randomly distributed throughout the entire site area. Seismically induced landslide considerations would be limited to the slopes adjacent to existing creeks.

Due to the uncertainty concerning liquefaction potential investigations of those areas identified as zone D should be conducted in order to determine the extent to which development in the study area is restricted.

Landfill sites present unique geotechnical problems, including differential settlement and liquefaction. These problems can be resolved, for the most part, through the design of the foundations of structures. The use of footings to a depth below the landfill and below underlying unstable soils eliminates settlement problems for structures. The landfill in the study area is from 15 to 20 feet deep and would, therefore, require footings at least that deep.

However, the landfill will still settle and will do so nonuniformly, increasing the difference in elevation between the structure and surrounding landscaping, parking lots, roads, etc. Moreover, nonuniform settling results in changes in elevation among and within these various areas. As a result, paving, joints, utility connections, and other site elements must be modified over time as settling occurs. The weight of materials on a fill site affects its rate of settlement. For example, areas covered with asphalt settle more rapidly than landscaping areas. The typical response to this problem where the junction between paving and another area is critical is to increase the thickness of the paving which, in turn, accelerates the rate of settlement.

The majority of settlement occurs during the first 15 years after completion of the landfill. Major modifications to site elements are less likely to be required after that period. One

response to this change in rate of settlement has been to develop fill sites temporarily as parks or to allow no development during the first 15 years. After that time construction can occur with fewer subsequent modifications.

A problem related to settlement is the release of methane gas as a result of anerobic digestion of organic matter. In the past the release of methane created odor problems and fire hazards. Now, however, the methane is tapped and used as a low-Btu fuel source. A potential solution to both the methane problem and, more importantly, the settlement problem is to reduce or eliminate the amount of organic matter—primarily wet garbage, yard waste and paper—added to the landfill. If wet garbage and yard wastes were composted or digested anerobically (together with sludge) and paper products were recycled, the remaining landfill would not only be more stable but its life span could be doubled.

Examples of all types of development can be found on landfill sites in the Bay Area. Mark Thomas and Company, consulting engineers on this study, provide the following ranking of land uses for landfill sites, based on rate of economic return on investment:

1. Golf course;
2. Industrial development of 80,000 to 100,000 square feet;
3. Convention center/hotel facility;
4. Small industrial park;
5. Residential development.

Hydrology and Water Quality

The study area is located in the Guadalupe River and San Tomas Aquino Creek watersheds. The Guadalupe River originates in the Santa Cruz mountains and flows northwest for 21 miles to the Alviso Slough, with a watershed of approximately 160 square miles. The San Tomas Aquino Creek drains a parallel but much smaller watershed.

Flooding Characteristics

The Guadalupe River has historically flooded, with the most recent major incidents occurring in December, 1955, and April 1958. However, the study area has not been subject to flooding since the levees along its banks were constructed, nor does it lie within the 100 year flood plain. The levee on the east side of the river is lower than that on the west side. Consequently, if the river were to overtop its banks, the City of San Jose to the east of the study area would be flooded while the study area would be unaffected.

Drainage

Land subsidence resulting from overdrafts of groundwater basins occurred from 1930 until 1969. Local subsidence of up to 11 feet has occurred in the study area. Subsequent

management of the groundwater basin including recharging has eliminated the subsidence problems. However, it is possible that groundwater pumping could exceed recharge and cause further subsidence.

As a result of land subsidence much of the study area east of Lafayette Street is at the same elevation or lower than the bed of the Guadalupe River. As was mentioned earlier, levees have been constructed to prevent flooding. Consequently, gravity flow of runoff into the Guadalupe River cannot occur. Current storm drainage practices developed in response to the drainage problem are discussed in Section V, Utilities.

Groundwater

Santa Clara County derived much of its water supply from groundwater in the County. The major producing aquifers including those in the vicinity of the study area are overlain by impervious silt and clay beds which prevent appreciable infiltration of surface water into the aquifers. These aquifers are recharged primarily by infiltration in the headwaters region. The beds in the study area are particularly impermeable which makes the area suitable as a landfill site from a hydrological perspective. However, the consequential perched water table also means that the groundwater table in the study area is high, ranging from less than 10 to 20 feet from the surface. This high groundwater table affects the liquefaction potential of the area as discussed under Geotechnical Conditions. The perched groundwater is naturally high in dissolved solids since it was once subject to salt water inundation.

Water Quality

The California State Water Resources Control Board (SWRCB) defines water pollution as impairment of a desired beneficial use of "any action that degrades water quality below existing levels". Water quality planning in California is directed toward achieving the highest water quality consistent with maximum benefit to the public. Present and potential uses of the lower San Francisco Bay waters, including tributaries such as the Guadalupe River and San Tomas Creek, as well as water quality objectives, standards and control measures are identified in the San Francisco Water Quality Control Plan (State Water Resources Control Board, 1975). The San Francisco Bay Regional Water Quality Control Board (RWQCB) reviews development near the San Francisco Bay to assure that project plans are in compliance with applicable water quality standards.

The water quality of the Guadalupe River itself has not been specifically monitored. However, since it drains to the southern portion of the San Francisco Bay, it does affect the water quality of the South Bay. The South Bay is the most poorly flushed portion of the San Francisco Bay system.

Water quality has historically been poor, making recreational water contact unsafe, shellfish beds unfit for human consumption, and noncontact water recreation less desirable. Coliform bacteria levels are generally high, and excessive algae growth occurs periodically, particularly during summer months, as a result of high nutrient concentrations. The South Bay has the lowest average dissolved oxygen concentrations, and the highest water temperatures and suspended solids concentrations of San Francisco Bay, primarily because of its shallow depths.

Non-point source water loads, including contaminants attributable to urban stormwater runoff, are also important contributors of water pollutants in the South Bay. Storm runoff contains small amounts of raw sewage, large amounts of plant and animal debris (leaves, dust, animal feces), and street contaminants (oil and grease, fuel residues containing lead, tire particles, and litter). Storm runoff is also the major source of many heavy metals, particularly lead, in San Francisco Bay. There is no evidence that any heavy metals or toxic chemicals exist at acute toxic concentration in any part of the Guadalupe River or San Francisco Bay, but there is considerable evidence that some of the metals have chronic effects on some aquatic fauna, particularly those at the higher trophic levels.

The role of the San Jose-Santa Clara Water Pollution Control Plant in preserving water quality is addressed in Section V, Utilities.

Air Quality

The study area is located in the San Francisco Bay Area Air Basin. This air basin has been designated as a nonattainment area for oxidant, carbon monoxide (CO), and particulate. Nonattainment refers to those areas that violate the National Ambient Air Quality Standards (NAAQS). Past air quality monitoring of air pollutant emission growth trends based on a summary of recently recorded air quality data from the San Jose monitoring station, along with the corresponding NAAQS, are presented in Table 2. These data indicate that a small number of violations of the NAAQS for oxidant, carbon monoxide, and particulates have occurred in each of the past five years at the San Jose monitoring station. Many of the violations of the carbon monoxide standard in the Bay Area Air Basin occurred at the San Jose station in 1979 (17 of the 24 violations). The San Jose and Los Gatos areas of the air basin also recorded the majority of the oxidant violations in 1979. One of the transportation improvements recommended in the 1979 Bay Area Air Quality Plan is the development of high occupancy vehicle (HOV) lanes on selected freeway segments.

Motor vehicles are the primary source of pollutant emissions in the Bay Area Air Basin. A summary of existing and

TABLE 2
AIR POLLUTION STANDARDS EXCESSES AT SAN JOSE
MONITORING STATION, 1975-1979.

DAYS EXCEEDING STANDARDS AT THE SAN JOSE BAY AREA AIR QUALITY MANAGEMENT DISTRICT STATION					
Pollutant (current standards)	1975	1976	1977	1978	1979
Oxidant OX ^a (12 pphm, 1 hour) F	8	7	3	12	4
Carbon Monoxide, CO (9 ppm for 8 hours) F	18	61	32	23	17
Nitrogen Dioxide, NO ₂ (25 pphm, 1 hour) S	0	3	0	0	0
Sulfur Dioxide, SO ₂ (50 pphm for 1 hour or 4 pphm for 24 hours) S	0	0	0	0	0
Total Suspended Particulate, TSP (100 ug/m ³ for 24 hours over 60 ug/m ³ annual geometric average) S	13.8 ^b	20.8 ^b	10.5 ^b	11.5 ^b	10.0 ^b

^a The Federal oxidant (OX) standard (8 pphm, 1 hour) has since been superseded (February, 1979) by the Federal ozone standard (12 pphm, 1 hour).

^b Percent of observed days when state air quality standard was exceeded.

Source: FHWA, October, 1979.

ppm: parts per million
pphm: parts per hundred million

S - State standard
F - Federal standard

Source: Santa Clara County Transit District, Guadalupe Corridor Alternatives Analysis, Working Paper No. 13, Environmental Impact Analysis, November, 1980.

TABLE 3
EXISTING AND PROJECTED EMISSIONS RATES
FOR SANTA CLARA COUNTY (TONS PER DAY)

POLLUTANT o SOURCE TYPE	INVENTORY YEAR			
	1975	1980	1985	1990
Carbon Monoxide				
o Mobile	792	585	401	356
o Stationary	45	51	57	62
o All	837	636	458	418
Organic Gases				
o Mobile	119	88	63	55
o Stationary	114	108	122	141
o All	232	196	185	196
Nitrogen Oxides				
o Mobile	99	96	87	92
o Stationary	31	39	46	55
o All	130	135	133	147
Particulates				
o Mobile	13.7	12.8	13.3	14.5
o Stationary	22.6	24.8	27.4	30.6
o All	36.3	37.6	40.7	45.1
Sulfur Oxides				
o Mobile	5.6	6.1	6.9	7.8
o Stationary	2.9	3.6	4.3	5.2
o All	8.5	9.7	11.2	13.0

Source: Air Resources Board, 1978

projected emissions from mobile and stationary sources in Santa Clara County are presented in Table 3. These data indicate that mobile sources account for a large percentage of carbon monoxide, hydrocarbon (or organic gases), and nitrogen dioxide emissions in the county.

The two most important air quality parameters affecting transportation related pollutants are total vehicle miles of travel (VMT) and average operating speed. These parameters are influential in determining the amount of pollutant emissions added to the air basin (which directly affects oxidant formation). A reduction in VMT and/or increased operating speeds (especially during peak commute periods) can result in reduced pollutant emissions (oxidant precursors and CO).

Reduced operating speeds are currently characteristic of several congested roadways which carry large peak hour volumes in the vicinity of the study area. Several sections of the Bayshore Freeway, Route 237 and Montague Expressway operate at heavily congested levels of service during peak commuting hours.

These increases in VMT are caused in part by the continued development of housing both in the south county and along the northeastern corridor through Milpitas to Fremont. Residents of the south county commute to job centers in the north county via the Bayshore Freeway and the Montague Expressway. Residents along the Milpitas-Fremont corridor commute to north county job centers via Route 237. Continued industrial development in the Santa Clara Valley will increase the demand for housing in these areas. As a result, traffic congestion will increase, accelerating the decline in air quality.

Vegetation and Wildlife

The undeveloped land, irrigated golf course, two retention ponds and the two streams bounding the study area constitute the wildlife habitats of the Guadalupe West area. With the exception of the cattle feedlot north of the Agnew Village, the unurbanized areas are essentially open grassy fields.

Such fields approximate the landscape of the Santa Clara County Valley floor prior to European settlement, which even then did not support a large amount of wildlife. Now, as then, grassland rodents and predatory birds are the major animal groups, although deer and coyote are no longer present and many non-native plant species have been introduced. The project area's grassy fields presently support a score of bird species (listed in Table 4), the most common of which are house finches and gold finches. Raptors such as hawks and kites feed on the abundant ground squirrels, gophers, and rodents.

TABLE 4
BIRDS AND MAMMALS IN STUDY AREA

A. Birds

Agricultural Land

White-tailed Kite

Red-tailed Hawk

Marsh Hawk

Sparrow Hawk

California Quail

Killdeer

Morning Dove

Red-shafted Flicker

Black Phoebe

Scrub Jay

Mockingbird

Loggerhead Shrike

Starling

Western Meadowlark

Redwing

Brewer Blackbird

Tricolor Blackbird

House Finch

American Goldfinch

Brown Towhee

White-crowned Sparrow

Song Sparrow

Creek Banks

Great Blue Heron

Greater Yellowlegs

Dowitcher

Long-billed Curlew

Avocet

Blacknecked Stilt

B. Mammals

1. Observed species

Black-tailed Jackrabbit

California Ground Squirrel

Pocket Gopher

Grey Squirrel

2. Presumed present

Meadow Mouse

House Mouse

Harvest Mouse

Deer Mouse

Norway Rat

The golf course sustains many of these savannah animals as well. Although irrigation makes it too moist a habitat for such native birds as quail, sparrows and starlings are at home here. Its mud and earthworms may attract robins and its planted trees may shelter owls. This area possibly supports about the same number of animals, but more variety of species is found in the open fields.

When measured by the number of species, animal population, and amount of activity (mainly feeding) that a habitat may support, the creeks and creek beds are of the highest value. They are the least disturbed by human intrusion and apparently recovered rapidly from the effects of channelization. They sustain a wide variety of native plant and animal species. Vegetation includes cattails (Typha sp.), bullrush (Scirpus sp.), annual grass and introduced species such as curly dock (Rumex crispus) and fennel (Foeniculum vulgare). Among the reeds are frogs, snakes, small fish, and mice, which in turn support birds such as the Great Blue Heron and, if fields are adjacent, the Curlew. The retention ponds are in effect extensions of this habitat and have been proposed, together with the streams, as wildlife refuges.

This stretch of the Guadalupe River may be considered a wetland under Section 404 of the Federal Water Pollution Control Act. Determination of its status is being investigated under the Guadalupe Corridor Project.

Noise

Aircraft noise is the principal contributor to the overall noise level in the study area. Figure 3 shows current (1980) and projected (1997) noise contours. According to the Airport Master Plan EIR noise contour mapping "is best used for comparative purposes rather than for providing absolute values. . . CNEL calculations are merely a means for comparing noise impacts, not precisely defining them relative to specific parcels of land." The noise level contours were derived from the Airport Noise Exposure Model MOD-7 developed by the U.S. Department of Transportation. This computer model uses average aircraft noise emission characteristics and average operational procedures for airports throughout the United States. To reflect conditions at the San Jose Airport, the results were calibrated based on noise monitoring in the area.

The Community Noise Equivalent Level (CNEL) noise descriptor, the use of which is required by the State of California in its airport noise standards, predicts, by a single number rating, the cumulative aircraft noise that affect communities in airport environs. CNEL represents the daily weighted average sound level in decibels during a 24-hour period, adjusted to account for the sensitivity of people to noise during the evening (7 p.m. to 9:59 p.m.) and night (10 p.m. to 6:59 a.m.) periods.

Table 5 identifies land uses compatible with various aircraft noise levels, based on guidelines originally developed for the U.S. Department of Housing and Urban Development. CNEL 65 is, according to California airport noise standards, the level of noise acceptable to a "reasonable" person residing in the vicinity of an airport. CNEL 75 is considered to be unsuitable for most types of urban development. The CNEL contour affects the southern portion of the residential area west of Lafayette Street.

At the present time the CNEL 75 contour does not impact the study area. The CNEL 70 contour includes about 60 single family parcels and 50 townhouses in the southwest portion of the study area. The CNEL 65 contour extends just north of Tasman Drive and includes all residential development west of Lafayette Street as well as 30 to 40 residential units east of Lafayette and most of the Agnews Hospital facility.

Noise level projections for 1997 assume implementation of measures established by the Airport Master Plan and Vicinity Area Actions to mitigate the noise impacts and the use of quieter aircraft such as the DC-9-80 which have recently been introduced at the San Jose Airport. Although aircraft will be quieter, flights will be more frequent with 1997 passenger service projected at 370% and freight at 220% of 1975 levels of service, resulting in an overall increase in noise levels. The CNEL 75 contour is not expected to affect the site. The CNEL 70 contour is expected to impact the same residential area affected by the 1980 CNEL 70 contour and the southwest corner of the Agnews Hospital site (currently undeveloped). The CNEL 65 contour would extend north to Highway 237, on the west side of Lafayette Street it encompasses all existing residential development south of Tasman Drive, all of the undeveloped land south of Tasman Drive and nearly half of the City-owned land north of Tasman. On the east side of Lafayette Street, the existing Agnews State Hospital facility, proposed Hope Rehabilitation Center and the subdivision south of the Hetch Hetchy Aqueduct are included along with a few parcels north of the Aqueduct.

A secondary consequence of increased air traffic at the San Jose Airport is increased ground traffic. Night time cargo flights have been proposed as a means of reducing day time ground and air congestion. However, an increase in night flights would exacerbate the noise problem. As mentioned above, night and evening CNEL levels are increased to reflect increased sensitivity to noise during that period. The 1997 noise level projections assume a reduction in night flights. If night flights were increased, the CNEL levels would increase correspondingly.

TABLE 5
LAND USE COMPATABILITY GUIDELINES
FOR AIRCRAFT NOISE ENVIRONMENTS

Land use category	Optimum CNEL contour value ^a	Optimum compatible CNEL contour value with special sound attenuating construction ^b
Residential—Single-Family, Duplex	65	75
Mobile Homes	65	65
Residential—Multiple-Family, Dormitories, etc.	65	75
Transient Lodging	65	75
Schools, Classrooms, Libraries, Churches, Day Care Centers, Museums	65	65
Hospitals, Nursing Homes	65	65
Auditoriums, Concert Halls, Music Shells	65	65 ^c
Resorts and Group Camps	65	65
Sports Arenas, Outdoor Spectator Sports	65	75 ^c
Playgrounds, Neighborhood Parks	65	— ^c
Golf Courses, Riding Stables, Water Recreation	70	— ^c
Cemetaries	70	— ^c
Office Buildings, Personal Business, and Professional	65	75
Commercial—Retail, Movie Theaters, Restaurants	70	75
Commercial-Wholesale, Some Retail, Industrial, Manufacturing, Utilities	75	80
Manufacturing, Communications (noise sensitive)	65	75
Livestock Farming, Animal Breeding	70	— ^c
Agricultural (except Livestock), Mining, Fishing	75+	— ^c
Public Right-of-Way	75+	— ^c
Extensive Natural Recreation Area	70	— ^c

- a. Adapted by PMM&Co. from Wilsey & Ham and Bolt, Beranek & Newman, "Airport Noise Impact—Planning Guidelines for Local Agencies," U.S. Department of Housing and Urban Development, November 1972.
- b. PMM&Co. recommendation for existing land uses with acoustical treatment. The amount of sound insulation required in a structure should be sufficient to reduce average interior noise levels to a 45 CNEL maximum. Although interior levels may be satisfactory, the exterior noise level may be disturbing to some associated outdoor activities.
- c. Outdoor land uses, not dependent on structures, are governed by the Optimum Compatible CNEL Contour Value in the column to the left.

Source: City of San Jose, Draft Environmental Assessment and EIR on the Airport Master Plan and Airport Vicinity Area Actions, 1980.

Figure 3 ENVIRONMENTAL CONSTRAINTS



Landfill Sites (20-100 yr. potential for lateral spreading)



Stormwater Retention Basin



Contaminated Soils

SEISMIC INSTABILITY



Limit of baywater flood potential;
Tsunami run up and dike failure



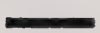
High potential for ground displacement
along fault lines (Bay mud thicker than
5 feet)

High potential for liquefaction and
lateral spreading:

Water table 0-10' below surface

Water table 10-20' below surface

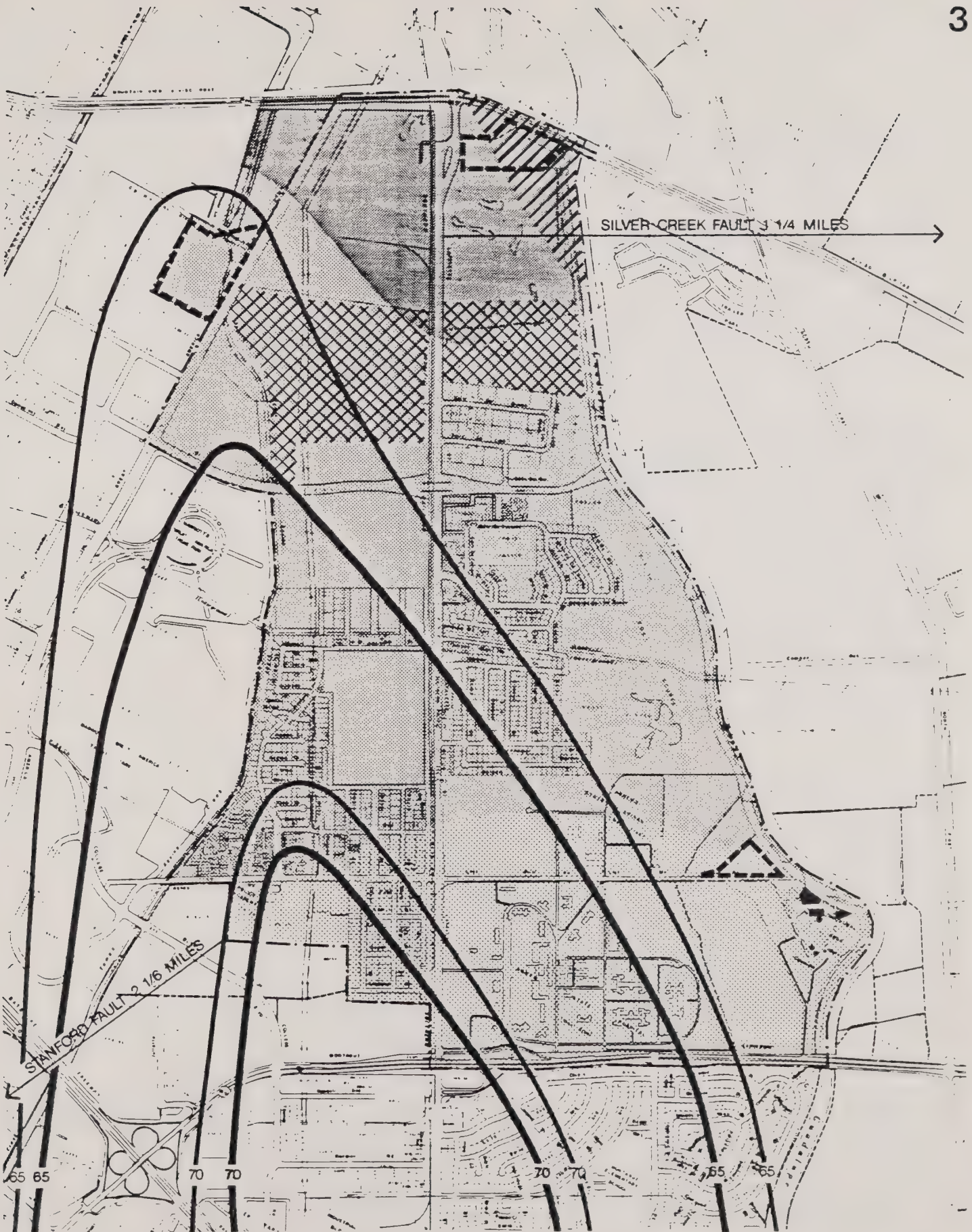
NOISE CONTOURS



1978 CNEL Contours



1997 CNEL Contours



III. EXISTING LAND USE

Vicinity

Land use in the study area's vicinity within City boundaries consists primarily of industrial facilities. The majority of these facilities are electronics research, development and manufacturing.

Land immediately adjacent to the study area to the south and west is industrial, with the exception of Marriott's Great America.

The San Jose Airport is located 2 miles south of the study area. Flights take off directly over the study area. Resulting noise contours are depicted in Figure 3 and were discussed in Section II.

Land to the east and north of the study area are located in the City of San Jose. Across Route 237 to the north, lies lands which are subject to flooding. The Newby Island landfill serving San Jose and Milpitas is located directly north of the highway. The currently approved landfill is scheduled to reach capacity in 1990. If an additional 220 acre site is approved at the Newby Island landfill (see Section V), operations will continue until 2015. The historic community of Alviso and the Alviso Marina are located north of the landfill, but no additional development is allowed due to the flooding hazard. A mobile home park is located to the east of the study area just south of Route 237. The remainder of the land between the Guadalupe River and First Street north of Montague is zoned for industrial development. A substantial amount of industrial development is currently under way.

Recreational land use in the study area vicinity include, in addition to Marriott's Great America, a 400-acre County Park site at the end of Great America Parkway, north of Route 237; the baylands north of Alivso which have been designated as a National Wildlife Refuge and which are used primarily for birdwatching; and the Alviso Marina which includes a County boat harbor with 70 berths. To the northeast of the County Park the City of Sunnyvale owns an undeveloped 90-acre parcel currently used for midget car racing and radio controlled airplanes. The City of Mountain View plans to construct a 700-acre Shoreline Park near Moffett Field which will include a golf course and lake as well as other recreational facilities.

Ownership and Parcelization

There are two primary land owners within the study area: the City of Santa Clara and the State of California. These two entities own the majority of undeveloped land. The State also owns the existing Agnews State Hospital. Other developed land is residential or industrial and is privately owned. Figure 4 depicts land ownership and parcelization.

Figure 4 OWNERSHIP/UTILIZATION

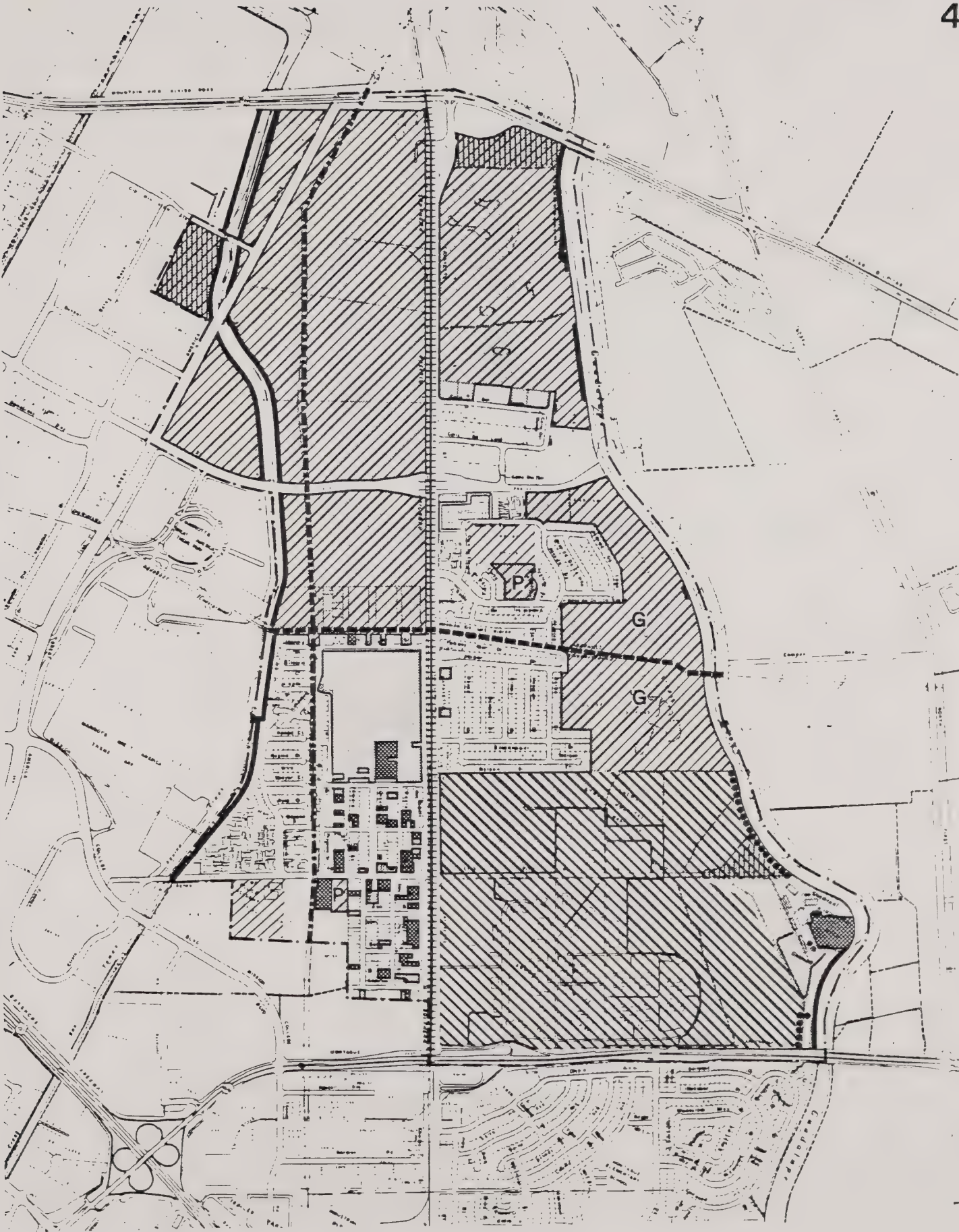
	Open Land
	Underutilized Land
	Park
	Golf Course
	Retention Pond

OWNERSHIP

	City
	State

OTHER PUBLIC AND QUASI-PUBLIC ENTITIES

	SCVWD Ownership
	SCVWD Easement
	City and County of San Francisco Ownership
	PG and E Easement
	Southern Pacific R/W



Publicly owned land, excluding roadways and drainage corridors, consists of the following:

A. The City owns 517 acres, most of which is located in the northern portion of the study area.

B. The State owns a 307-acre site in the southern portion of the study area.

C. Four corridors of land along the Guadalupe River are owned by the Santa Clara Valley Water District (SCVWD). These 35-foot wide parcels include approximately 30 percent of the river's edge. The SCVWD also holds easements on an additional 17 percent of the river's edge.

D. The City and County of San Francisco owns a 1-mile long strip of land (8.5 acres) under which a secondary aqueduct from the Hetch Hetchy reservoir runs. This aqueduct supplies some water to Santa Clara.

E. Pacific Gas & Electric Company (PG&E) holds an easement running from north to south through the study area.

F. The Southern Pacific Railroad Company owns a 50-foot wide corridor that parallels Lafayette Street throughout the study area (2.2 miles) for a total of 6 acres.

Privately owned land consists of the following:

A. A 46-acre industrial park, in which each parcel is individually owned, is located adjacent to the proposed Guadalupe Corridor.

B. Residential development encompasses 233 gross* acres. Agnews Village which lies between Lafayette Street and the PG&E easement in the southwestern portion of the site, is the oldest neighborhood. Other residential developments were constructed around the Agnew village neighborhood and in the east central portion of the study area.

C. A major undeveloped parcel north of Agnew Village is owned by a single party. The 48-acre parcel is currently zoned for agricultural use and is part of the unincorporated county. Streets had been dedicated to accommodate residential development but those dedications have subsequently been rescinded. The parcel has been for sale for some time.

*Gross acreage includes local street rights-of-way.

D. A second undeveloped parcel is the 27.5-acre Lick Mill site along the Guadalupe River, also owned by a single entity.

Current Land Use

Current land use is depicted in Figure 5. The distribution of land area by use is shown in Table 6.

Publicly owned land is used in the following way.

A. Of the City's 517 acres, 111 acres are designated for recreational use: the 105-acre Fairway Glen Golf Course, the 1.97-acre Agnew Park and a 4-acre site adjacent to the Kathryn Hughes School to be developed as another neighborhood park. The Kathryn Hughes School comprises 8.45 acres and the police academy 9.2 acres. The majority of City owned land has been designated for use as sanitary landfills. Of the total 285 acres designated for landfill, 81 acres have been filled and are closed to further fill. A 58.5-acre parcel is currently being filled and is scheduled to close in 1982. The remaining 145 acres are scheduled to be used as landfill through 2004. A 24-acre parcel west of Lafayette and designated as landfill is currently used as a flea market on weekends. The parcel is leased from the City by the Santa Clara Flea Market. The current lease expires in 1983. Another parcel, east of Lafayette, has been leased to the Police Athletic League (PAL) for dirt bikes and another parcel for radio controlled model airplanes. Figure 6 shows the sequence of use scheduled for the remaining landfill sites. The City uses 29.5 acres as retention ponds. One pond is located in the northeast corner of the study area while the other is located on the northwestern section. The northeastern pond is ~~expected to be expanded~~ to accommodate additional runoff as the study area is developed, ~~more~~ intensely.

B. Of the 307-acre Agnews State Hospital site, 181.4 acres are in use as the hospital, which serves the developmentally disabled. Of the 125.6 undeveloped acres, 70 acres between the existing hospital facilities and the Guadalupe River is currently being planned for housing. A 43.0-acre parcel north of the existing hospital has been leased to the Hope Foundation for development of a commercial and light industrial facility at which developmentally disabled individuals will be employed. The first phase of the project is slated for construction in 1981.

C. The land along the Guadalupe River owned by the SCVWD is used for access to the river.

D. The Hetch Hetchy corridor is undeveloped and unlandscaped.

E. Where the PG&E easement runs through residential areas it is incorporated into yards of single-family detached dwellings and shared open space maintained by a homeowners' association in a townhouse development.

F. The SP track that parallels Lafayette Street is used both for freight transport and by Amtrak. The Amtrak passenger trains pass through the study area twice each day, once northbound and once southbound. At present two public roads cross the SP track at grade: Agnew Road in the southern portion of the study area and an access road to the Flea Market in the north. Tasman Drive crosses the SP track via an overpass. Other grade crossings have been eliminated by the City over the past years to reduce safety hazards. In order to obtain additional crossings, approval must be obtained from the California Public Utilities Commission (PUC). Due to the heavy rail use of this main SP line, the PUC favors grade-separated crossings. Prior to requesting PUC approval, an agreement must be reached between the Southern Pacific Rail Company and the public or private entity requesting access.

Privately held lands are used in the following ways:

A. The industrial park consists primarily of small-scale light manufacturing and service operations. The industrial park is 50 percent built-out at present.

B. Residential development consists primarily of single-family detached dwellings at an average density of 5 units per gross acre and secondarily of single-family attached dwellings (townhouses and duplexes) at an average of 11 units per gross acre.

C. The undeveloped parcel north of Agnews Village is currently used as a cattle feedlot.

D. A proposal for a medium density residential development has been submitted to the City for the Lick Mill site. The proposed project includes 4-story condominium complexes at a density of 29.5 units per gross acre. The historic Lick Mill Mansion and grounds would be preserved in their present forms.

Figure 5 EXISTING LAND USE

	Residential	DU/AC
	Single Family Detached	1-7
	Duplex/Townhouse	8-12
	Low Density Apartment	13-18
	Medium Density Apartment	19-25
★	Commercial	
	Industrial	
	Institutional	
	Post Office	
	School	
	Police Academy	
	Hospital	
	Utilities	
	Recreation	
	Agriculture	
	Historic Trust	
	Undeveloped	

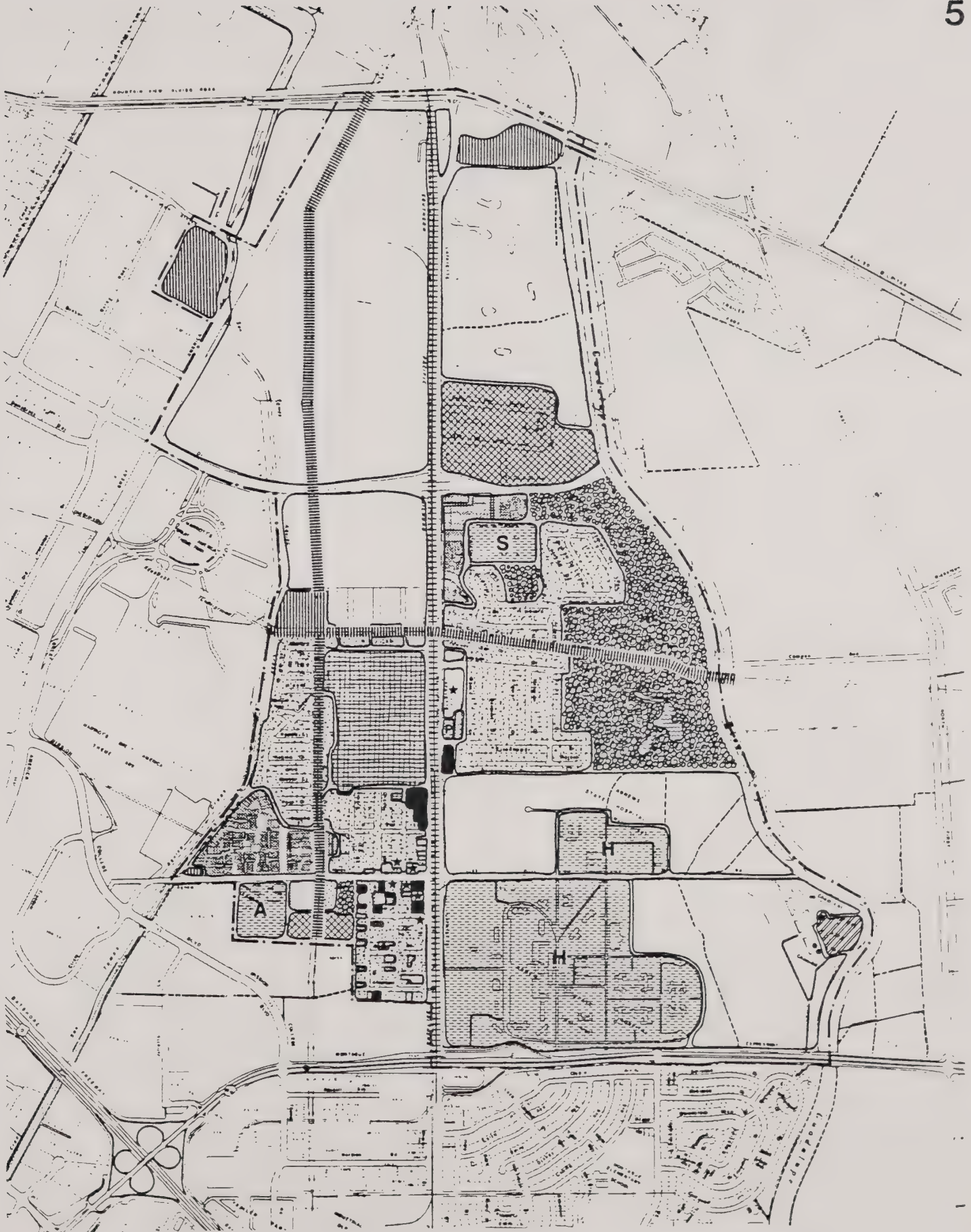


TABLE 6
DISTRIBUTION OF LAND USE

	Gross Acreage (Includes local Street R.O.W.)	Net Acreage (Parcels only)	Floor Area (Square Feet)	Floor Area Ratio (FAR) ¹ (Coverage-if different)
INDUSTRIAL				
<u>Developed</u>				
Industrial Park (NE)	23.1	22.6	283,665	29%
SW Quadrant		6.4	81,226 ²	29%
<u>Undeveloped</u>				
Industrial Park (NE)	22.7			
Hope Rehabilitation Center (SE)	55.6 45.0			
COMMERCIAL				
<u>Developed</u>				
Neighborhood		6.9	46,900	16%
Thoroughfare		0.9	8,800	23%
<u>Undeveloped</u>				
		0.3		
RESIDENTIAL				
<u>Developed</u>				
Single Family Detached (6 du/gross acre)	180.5	135.4	1,592,467 ²	27%
Duplex/Townhouse (11 du/gross acre)	51.5	38.6	739,823 ²	44% (22%)
Low Density Multifamily (18 du/gross acre)	0.9	0.7	16,771 ²	55% (27%)
Medium Density Multifamily (25 du/gross acre)	7.4	5.5	153,331 ²	64% (21%)

¹F.A.R. refers to Floor Area/net acreage

²Estimated

TABLE 6 (Continued)

	Gross Acreage (Includes local Street R.O.W.)
<u>Undeveloped</u>	
Lick Mill	27.5
Agnews Hospital	70.0
 INSTITUTIONAL	
<u>Developed</u>	
Agnews Hospital	181.4
Police Academy	9.6
Elementary School	9.2
Post Office	0.8
 OPEN SPACE/RECREATIONAL	
<u>Developed</u>	
Retention Ponds	29.5
Completed/In-Progress Landfill	139.5
Golf Course	105.0
Neighborhood Parks	6.0
Hetch Hetchy Aqueduct	8.5
<u>Undeveloped</u>	
Designated Landfill (City)	145.0
 AGRICULTURAL	48.0
 UNDEVELOPED/UNDESIGNATED	
Private	24.0
City of Santa Clara	83.3 - 80 + 3.3
 MAJOR ROADS, CREEKS, MISC.	188.0
 TOTAL	1443.0

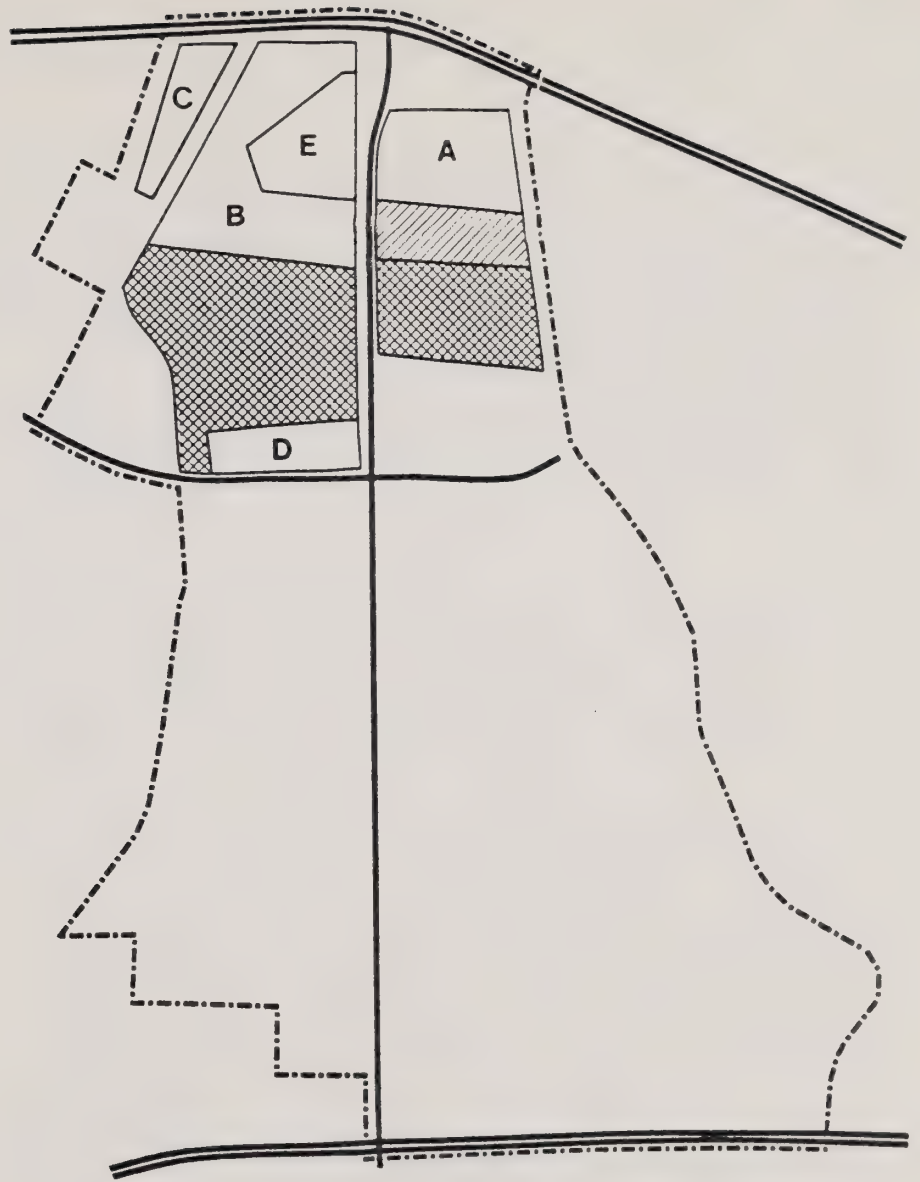


Figure 6 SANITARY LANDFILL AREA

STATUS		SIZE/ACRES
	Completed	81
	In Operation	58.5
	Proposed Operation Periods	
	A 1982-88	35
	B 1988-96	59
	C 1996-98	11
	D 1998-2000	16
	E 2000-2004	24

IV. TRANSPORTATION

This section will address transportation facilities serving and located in the study area. Public transportation facilities include the San Jose Airport, the Amtrak and SP Commuter rail lines, the proposed Guadalupe Corridor light rail line, and Santa Clara County buses. Private transportation modes - automobiles, bicycles and pedestrian movement - utilize the roadway network. A traffic study of a portion of the Guadalupe West area was recently prepared by the City of Santa Clara Department of Engineering. That report is the primary source of information on traffic conditions in the study area.

Traffic Conditions

The principal roadways within and bordering the study area are listed in Table 7. Capacities and current average and peak volumes are given for each. As Table 7 indicates, Highway 237 and the Montague Expressway are already exceeding average and peak capacities as does the Bayshore Freeway.

Budgeted roadway improvements in the area include the reconstruction of the Montague/San Tomas/Bayshore Freeway (101) interchange and the expansion of Montague. CALTRANS plans to begin construction of a six lane overpass on Montague and full cloverleaf interchange to replace the existing two-lane crossing in May, 1981. The County of Santa Clara will begin construction of two additional lanes on Montague Expressway. Montague, including the Guadalupe River Bridge, was designed and has adequate right-of-way to accomodate a full six-lane divided expressway. At the present time there are four lanes for through traffic with additional acceleration/deceleration (speed change) lanes at intersections.

Other planned improvements are the widening of Agnew Road to a four lane arterial by the City and the extension of Tasman Drive across the Guadalupe River and through north San Jose which would require a joint effort of the cities of Santa Clara and San Jose. The City's traffic study concludes that, after improvements, Lafayette Street and Angews Road "should be adequate to accomodate the projected traffic" from the development of 1000 condominium dwelling units in the Lick Mill property, 1210 dwelling units and a small commercial facility on the Agnews Hospital site, and 1870 condominium or garden apartment units on the Fairway Glen Golf Course. Improvements on Montague Expressway "will enable the expressway to at least keep up with the future traffic flow." De La Cruz is expected to be adequate over the next ten years except at the intersection of Montague Expressway where congestion on Montague will cause delays. The City's evaluation of adequacy did not include potential development on city owned lands currently slated for landfill.

TABLE 7
MAJOR ROADWAY IMPROVEMENTS

<u>Name (designation)</u>	<u>Section</u>	<u>Right-of-Way (Feet)</u>	<u>Number of Lanes</u>	<u>Average Daily Traffic Current</u>	<u>Daily Traffic Capacity</u>	<u>Peak Hour Current</u>	<u>Traffic Capacity</u>
<u>East-West</u>							
Route 237 (divided expressway)	Guadalupe R.- San Tomas Cr.	190-210	4	38,000 (1979)	39,000	3,800	4,800
Tasman Drive (divided arterial)	Guadalupe R.- San Tomas Cr.	60-300	4	6,938 (7/78)	27,000	800	3,000
Agnew Road (thoroughfare)	Lafayette St.- San Tomas Cr.	60	2-4	7,676 (3/80)	10,680	973	1,500
Montague Expressway (divided expressway)	Guadalupe R.- Mission College Rd.	125-250	6 ¹	34,559 (4/80)	Unknown ²	4,476	Unknown ²
<u>North-South</u>							
Great America Parkway (divided arterial) peak 10am Sat.	Route 237- Tasman	125-140	6	9,716 (5/89)	39,000	2,750	3,510
	Tasman- Mission College Rd.	125-140	8	8,454 (9/79)	50,000	2,393	4,500
Lafayette Street (divided arterial)	Route 237- Montague Expressway	60-90	4	15,723	27,000	1,417	3,000
De La Cruz Boulevard	at Montague Expressway	60	4	7,000	20,000	900	3,000

¹Currently 4 lanes; expansion to 6 lanes in 1981.

²Under evaluation by Santa Clara County; capacity estimate expected to be available April, 1981.

Sources: City of Santa Clara, Engineering Division, "Traffic Volume Flow Map", 6/23/80.
City of Santa Clara, Engineering Division, "Angews Hospital Traffic Study," no date.

Route 237 was, prior to February 1980, scheduled for expansion by the state. At that time, however, the planned improvement was eliminated from the State's highway improvement plan. It is of course, still designated for expansion in the City's 1978 General Plan. The Draft Santa Clara County General Plan (April 1980) maintains the designation for improvement to freeway status.

The City Council has approved a four-lane road connecting the Lick Mill property to the Montague Expressway. In order to develop the Agnews Hospital housing site, the Hope Rehabilitation Center and the Fairway Glen Golf Course, the road would have to be extended west to Lafayette Street. Local residents have expressed concern that commuters would use this new Montague-to-Lafayette connection to avoid congestion at the intersection of Lafayette and Montague. That congestion results from commuter traffic from industrial development northwest of the study area which uses Tasman and Lafayette to reach Montague Expressway in order to bypass congestion at the intersection of Great America Parkway and Montague. That congestion, in turn, is caused in part by the inadequate Montague-San Tomas-Bayshore interchange and traffic flows in excess of capacity on Montague. The expansion of Montague and of the Montague-San Tomas-Bayshore interchange will relieve congestion both at the Lafayette and the Great America Parkway intersections, reducing to some extent, the need for commuter short-cuts to Montague.

Regardless of the effect of the Montague expansion on commuter use of Lafayette Street, traffic flows on Lafayette are likely to increase as the study area is developed. As indicated above, Lafayette is not presently used to capacity and is expected to be adequate for anticipated traffic generation. However, as traffic flows increase, traffic signals will be required to accomodate movement to and from local streets.

The design of the access road to the Lick Mill property and future development in the southeast quadrant of the study area is constrained by standards established by the County of Santa Clara to assure safe and efficient use of expressways. County approval must be obtained in order to upgrade an existing private road or to construct a new road which intersects a County expressway. Such intersections require the construction of speed-change lanes of 300 feet (without taper) in either direction of the expressway. The County requires the developer to construct the speed-change lanes in cases where a development includes a connection to an expressway. A second County standard is the requirement that traffic signals be located at a minimum of one-half mile increments.

There is adequate right-of-way for the construction of speed-change lanes on Montague Expressway from the proposed interchange to the Guadalupe River Bridge. However, the bridge itself cannot accommodate a speed-change lane. Consequently, a private or public street or driveway must be located more than 300 feet from the bridge.

There is a traffic signal on Montague at First Street to the east of the Guadalupe River Bridge. The alignment of the access road approved by the City Council is located more than 300 feet from the Guadalupe River Bridge which allows for a speed-change lane of the required length. The access road is located less than 0.5 miles from First Street which prohibits the installation of a traffic signal. If it were relocated, a traffic signal could be installed. However, a traffic signal at the intersection of Montague and De La Cruz is also being considered. De La Cruz is 0.7 mile from First Street or 0.2 mile from the alternate access road. Due to the proximity of De La Cruz and the proposed access road, only one of the two can include a traffic signal.

Public Transportation

There are two public transportation modes currently serving Santa Clara: bus and rail. Figure 7 depicts local and express bus routes in and around the study area which are served by the Santa Clara County Transit District. Local bus service in Santa Clara County tends to converge in downtown San Jose. Express service runs between employment centers in the north and housing in the south county along freeways and expressways. Local buses in the study area are limited since the area is undeveloped; transfers are required to travel from the study area to downtown San Jose.

The Southern Pacific Commuter Rail Line runs from downtown San Jose to San Francisco, paralleling the Bayshore Freeway (Highway 101). The nearest station is located in downtown Santa Clara, 3 miles south of the study area. This line is designed to serve commuters living in the South Bay and working in San Francisco or the peninsula.

The north-south Amtrak Coast Starlight line runs through the study area between San Jose and Oakland. It runs south in the morning and north in the evening.

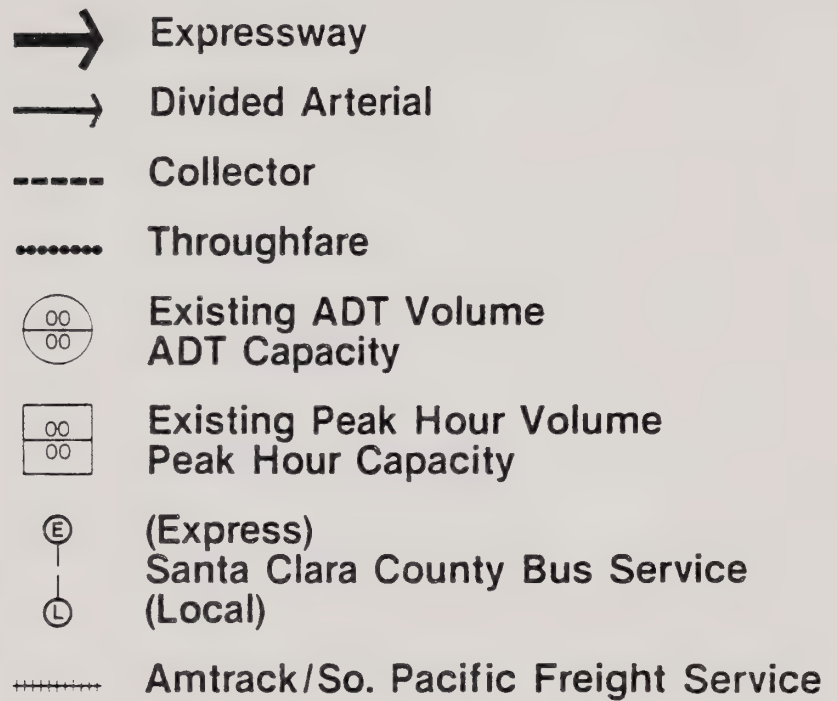
The expansion of Amtrak service between Sacramento and the Bay Area with a terminus in San Jose is being considered by CALTRANS.

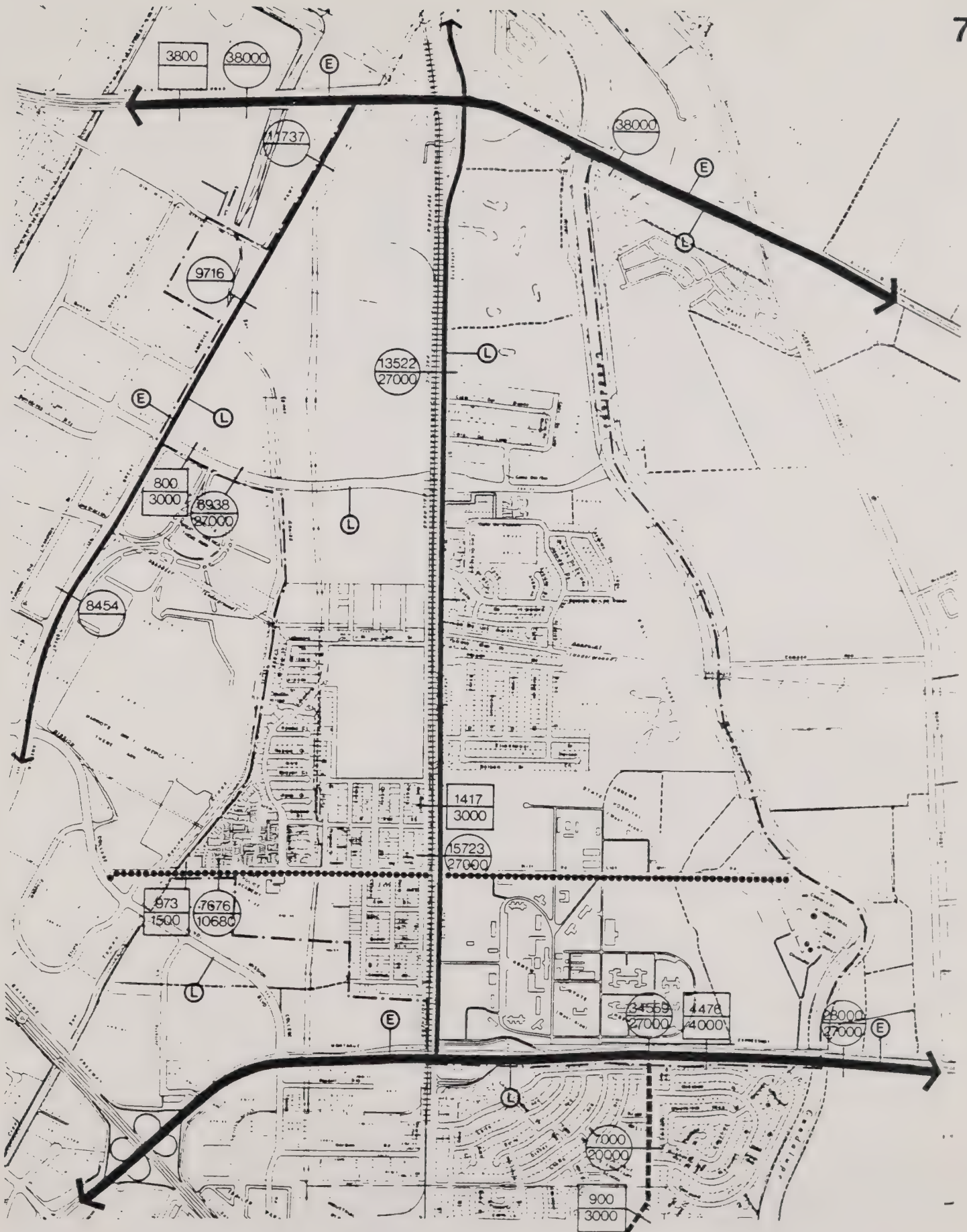
Amtrak service may shift from the main SP line running through the study area to the Niles Branch Line east of the main line. This relocation would be required if the downtown San Jose Amtrak station were relocated to First and Basett as proposed in the Guadalupe Corridor Study. The Niles Branch Line passes within 2.5 miles of the Fremont BART station and 0.2 miles of the Union City BART station.

Freight Rail Service

Southern Pacific (SP) freight lines use the same SP line running through the study area. On an average day, 10 trains each with 60 to 70 cars travel through the study area between Los Angeles and Oakland. SP acquired adequate right-of-way for a second track paralleling the existing one. However, SP has no plans to build a second track at this time.

Figure 7 TRANSPORTATION FACILITIES





V. UTILITIES

Water Supply

Domestic and industrial water in the study area is provided by private water companies regulated by the California Public Utilities Commission and the City of Santa Clara. The overall water supply is regulated by the Santa Clara Valley Water District. The majority of the water supply (approximately 80 percent) is presently pumped from the groundwater basins and supplemented with supplies from the City of San Francisco's Hetch Hetchy Aqueduct and the South Bay Aqueduct of the California Water Project. Agnews State Hospital is served by a direct line from the Hetch Hetchy Aqueduct which runs through the study area. Additional water supplies are expected to be imported via the federally funded San Felipe Project which is scheduled for completion in 1987. Upon completion of the San Felipe Project, these combined sources are expected to be adequate to meet County water needs through 2020.

Figure 8 shows existing water mains serving the study area.

Sanitary Sewers and Wastewater Treatment

The San Jose-Santa Clara Water Pollution Control Plant is owned jointly by the two cities. Capacity is leased to other municipalities in Santa Clara County. The plant was originally designed to accommodate a flow of 143 million gallons per day (MGD). However, subsequent to the upgrading of its treatment capability in 1974, the facility has reached capacity at only 130 MGD, during the 1979 canning season.

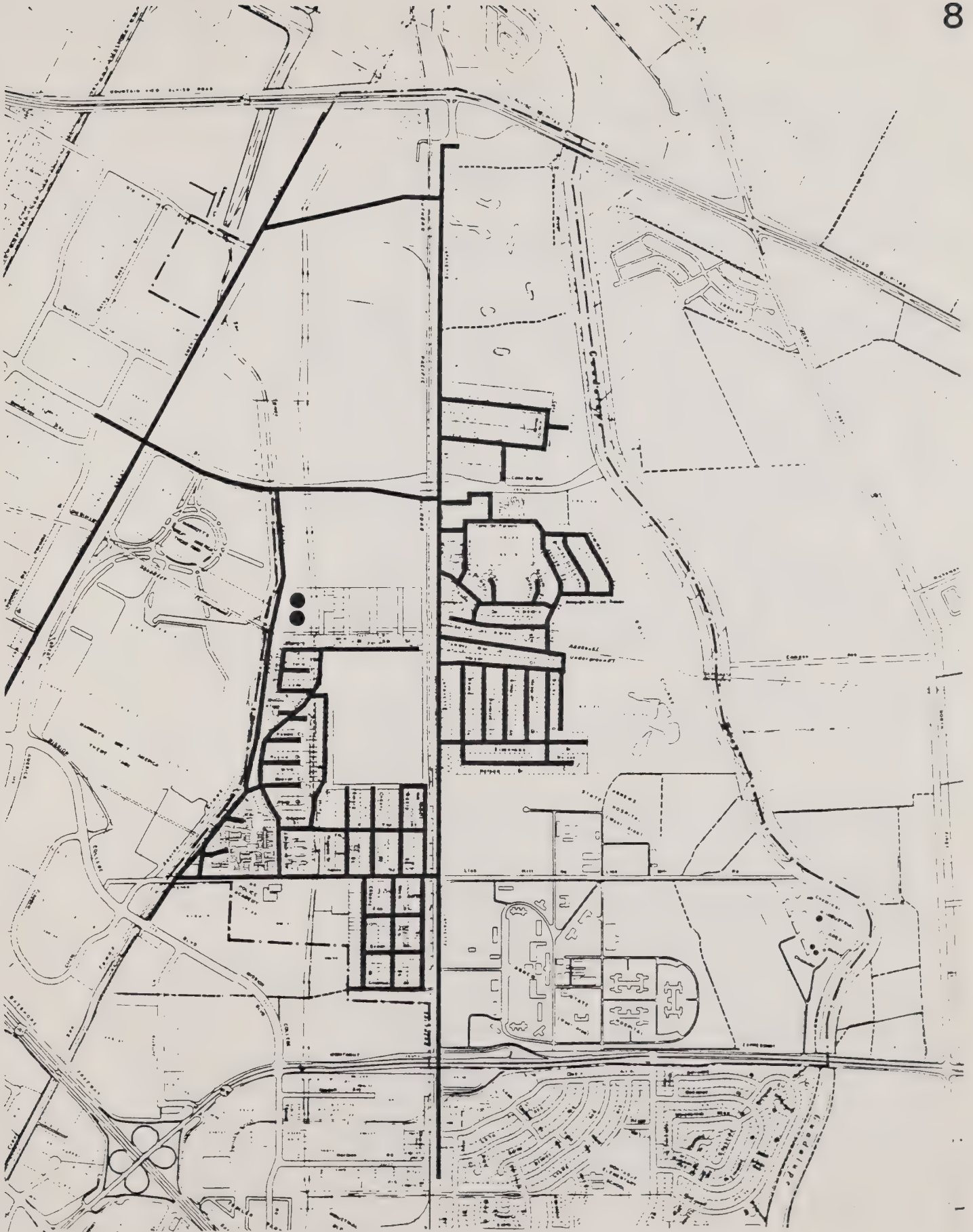
The EPA has funded a \$262,000 federal grant as a first step toward bringing the plant up to its design capacity of 143 MGD. The total cost of construction, scheduled for completion in 1982, is expected to amount to \$22 million of which the majority will be funded by EPA grants. To avoid the imposition of a moratorium on new hookups by the State Water Quality Control Board in the interim the City of San Jose adopted the following measures:

- o an ordinance prohibiting the issuance of building permits for new construction that would overload the plant;
- o an ordinance calling for voluntary reductions in sewage outflow from major industries when an overload is threatened and, if that fails, mandatory cutbacks with noncompliance resulting in fines of up to \$50,000 per day;
- o A citywide water conservation plan.

The Regional Water Quality Control Board has postponed its decision on a moratorium for two months. To avoid a moratorium at that time the following requirements must be made:

Figure 8 WATER SUPPLY SYSTEM

- Water Supply Main
- Storage Tank



- o San Jose must compile accurate data on existing sewage flows and projections of future flows;
- o Other users including Santa Clara must provide guarantees that they can restrain flows;
- o Users must agree on a method of appropriating treatment capacity and of ensuring that they will not exceed allocated capacities.

In addition to upgrading plant capacity to 143 MGD San Jose and Santa Clara have proposed a plan for increasing capacity to 160 MGD. That plan calls for the establishment of a joint powers agreement (JPA) between San Jose and Santa Clara that would establish an agency empowered to sell as much as \$10 million in bonds to finance the expansion. The JPA must be authorized by the State legislature; SB 103 has been introduced to obtain this authorization and is expected to be approved. This funding would be used to expand the existing plant, to build a chlorine storage facility and waste storage ponds, and to build sludge treatment facilities.

The timetable for the plan calls for State authorization by March 1981; public hearings regarding increased rates and connection fees in April 1981; sale of JPA bonds by November 1981; completion of plans by July 1982; and completion of construction by August 1983.

According to the City of Santa Clara, its share of improvements would require expenditure of \$10,325,000 of which \$9,076,000 is now available, leaving at least \$1,241,000 to be financed from JPA revenue bonds or other sources.

At the plant's current operating capacity Santa Clara is forced to lease capacity back from other users in order to meet its demand. Even after the plant is upgraded to 143 MGD Santa Clara will still exceed its allocation and continue to lease capacity from other users. The planned expansion to 160 MGD is expected to provide capacity adequate to 1990, assuming a growth rate of 15 to 17 percent between 1980 and 1990, based on historical growth trends in Santa Clara.

The 15 to 17 percent growth rate appears to correspond with growth policies in the 1977 General Plan, assuming buildout of undeveloped land designated for residential commercial and industrial development. The Guadalupe West study area is not designated as undeveloped land in the General Plan and, therefore, not included in the General Plan growth projection. Consequently, if both the development projected in the General Plan and development of the study area occur, available sewage capacity may again be exceeded.

Figure 9 SANITARY SEWER SYSTEM

—— Existing Sewer Main

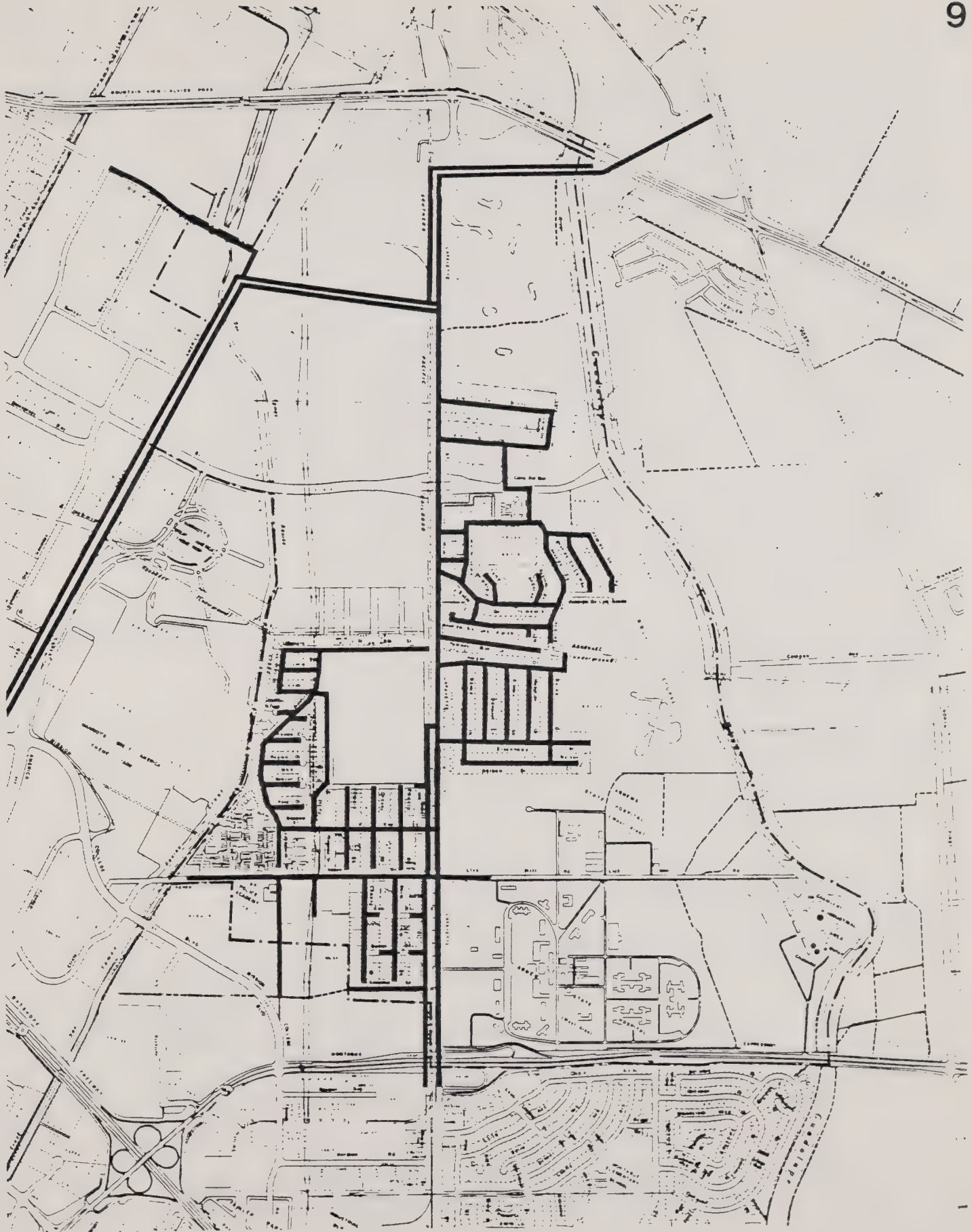


Figure 9 shows existing sanitary sewer mains in the study area. The sewer main along Lafayette Street is designed to accomodate flows from the entire central portion of the city. However, the southern half of the city's central area is discharged via a sewer line running east which connects to the City of San Jose's sewer main to the Water Pollution Control Plant. This route is preferred since it flows by gravity while the Lafayette sewer main must be pumped to the plant.

However, if the eastern portion of Santa Clara (the downtown area) is redeveloped at a higher intensity of use, the east line will have to be used for that area's increased discharge and the Lafayette main will transport the entire central area. The Lafayette main was designed to accomodate the central area assuming the development of the study area at the following densities and land use patterns: in the area north of the Hetch Hetchy Aqueduct, 651 acres of industrial development at 30 persons per acre, each producing 75 gallons of wastewater per day and 104 acres of residential development at 18 persons per acre,* each producing 75 gallons per day for a total discharge of 5.14 MGD. The area south of the aqueduct is assumed to be developed for residential use at a density of 18 persons per acre.

Storm Drainage

The current storm drainage system serving the study area is depicted in Figure 10. It consists of two drainage basins, separated by Lafayette Street. The west basin is discharged into the San Tomas Creek at several points. At the northern end of the basin a retention pond allows for accumulation of runoff during periods of peak flow, and some recharge of the ~~groundwater table~~. This retention basin drains into the creek by gravity flow. The east basin is discharged into the Guadalupe River at a single point at the northern end of the basin.

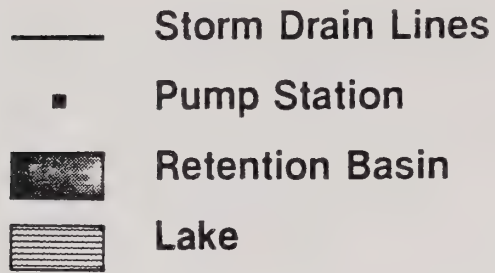
An open drainage channel runs parallel to the river into a retention pond which again allows some recharge of the groundwater table. The water in the pond must be pumped through the levee into the Guadalupe River. An informal retention pond is located in the southern portion of the site on the Fairway Glen Golf Course.

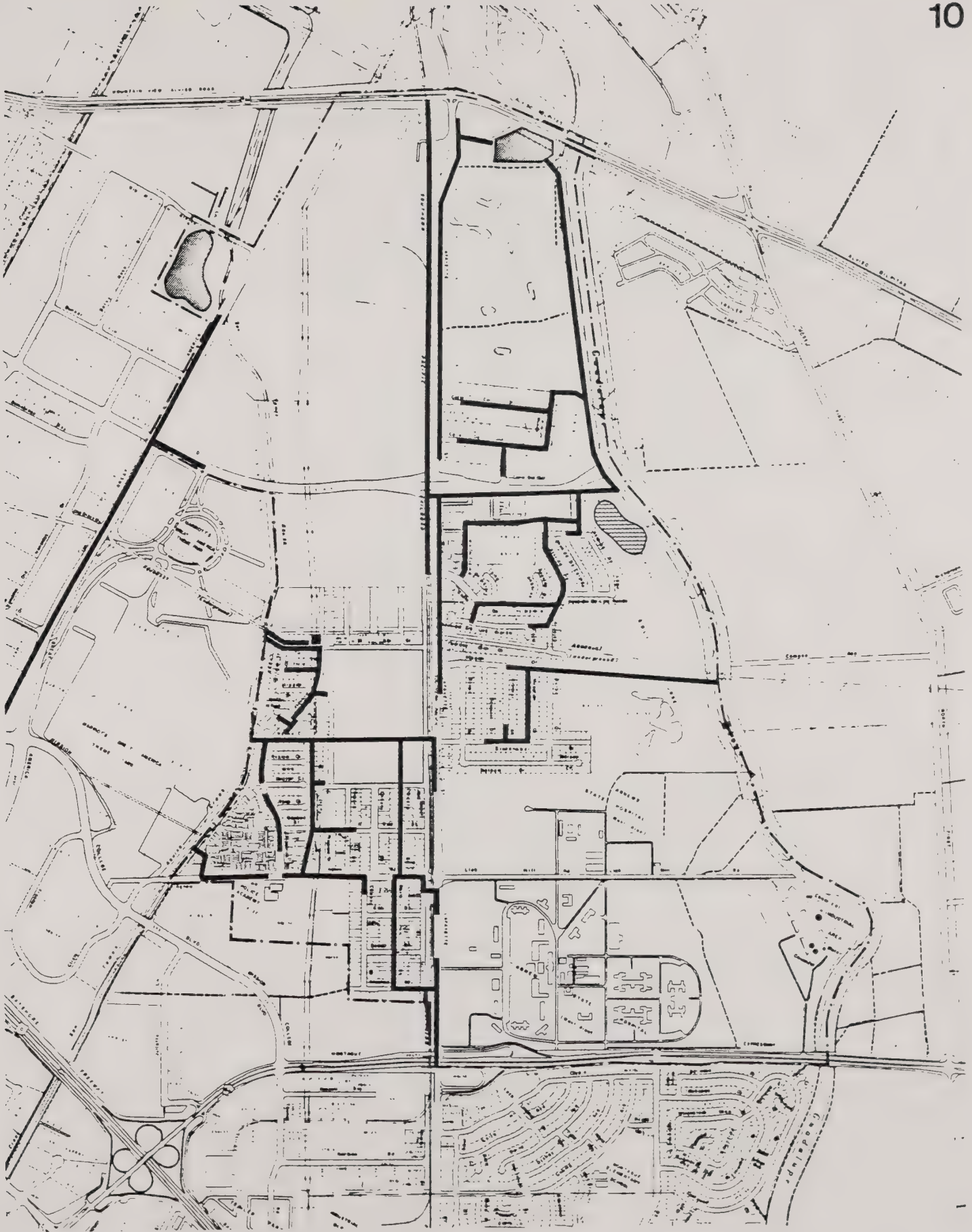
Solid Waste Disposal

Solid waste in the City of Santa Clara is currently disposed of at the landfill site located in the northern portion of the study area. If all currently designated parcels are used for landfill, the site could accomodate waste produced by the

*At 2.5 persons per unit, 18 persons per acre is equivalent to a density of 7.2 dwelling units per gross acre.

Figure 10 STORM DRAIN IMPROVEMENTS





City through the year 2004. Currently approved solid waste disposal facilities in most areas of the County will be filled to capacity by 1990 and the availability of additional sites is severely limited by environmental and political constraints. The Solid Waste Management Plan of Santa Clara County, prepared in compliance with the California Solid Waste Management and Resource Recovery Act of 1972 and adopted by the County and 15 cities, attempts to address solid waste management comprehensively on a County-wide scale. The Plan divides the County into four service areas. The Central Service Area includes Santa Clara, San Jose and Milpitas.

As a first-stage solution to the solid waste problem, the Plan recommends development of transfer/processing stations with at least one in each service area. The transfer/processing station could include a centralized recycling facility and grinding facility to reduce volume. The reduction of volume would extend landfill life somewhat and reduce the cost of transporting wastes to landfills which will ultimately be remote from the service areas.

The second-stage solution recommended by the Plan is to develop solid waste combustion facilities. Even after recycling and combustion, a volume of waste will remain, although it will be greatly reduced from the current volume. The Plan recognizes this fact and originally recommended that a more intensive study of potential sites be undertaken. As a result of extreme opposition by some cities, this recommendation was deleted from the Plan. Consequently, there is currently no plan to identify and acquire landfill capacity to provide for disposal beyond 1990 in most of the County.

The landfill situation in the Central Service Area may become critical in the next few years. Although the Plan indicates that the Newby Island site will serve San Jose and Milpitas beyond the year 2000, the availability of service beyond 1990 is dependent upon approval of 220 acres adjacent to the present landfill site. Approval may not be granted for a variety of reasons including proximity to the National Wildlife Refuge and potential water quality problems.

The Solid Waste Management Plan does not recommend residential source separation and recycling as a means of reducing the volume of waste. Since the Plan's preparation, however, source separation/recycling has come to be seen as the most immediately viable and most economical means of reducing the volume of waste. As recycling has become economically viable, recycling facilities have opened up throughout the County. There are currently 15 nonprofit recycling centers in the County as well as industry-operated facilities. The People Who Care Recycling Center in Santa Clara accepts glass, tin, aluminum, newsprint, motor oil, cardboard, computer print-out paper and tab cards, and white or colored ledger paper.

The Santa Clara County Solid Waste Management Technical Advisory Committee estimates that the composition of municipal solid waste* is:

newsprint	8%
cardboard	8%
other paper	12%
glass	6%
metals	8%
food waste	7.2%
yard waste	8%
moisture	30%
inerts	10.8%
plastics	2%*

Based on these values, the volume of solid waste could be reduced by 80% as a result of source-separation/recycling and composting (individual or central facility) leaving only 20% of the projected solid waste generation to be combusted or disposed of in landfill. Centralized composting is especially viable in Santa Clara where yard wastes are collected separately each week by the City.

Police and Fire Service

There are currently no police nor fire stations located within the study area. The nearest fire station is located at 2400 Agnew Road, just west of the study area. Another station is located at 3375 De La Cruz, four blocks south of the Montague Expressway. A third station is under construction south of the Bayshore Freeway. There are, in addition, plans to relocate an engine company to Tasman Drive adjacent to the San Tomas. When all of these facilities have been constructed, all portions of the study area will be located within one mile of a fire station, the criteria established by the Santa Clara Fire Department for adequate service.

The need for additional police service as a result of additional development is dependent on a variety of factors. For residential development, density, age distribution and income of residents affects the amount and type of service required. The scale and intensity of use of industrial, commercial or recreational facilities affect service requirements. The magnitude of development being considered for the study area is expected to require

*Since the composition will vary by location, season, land use mix and economic characteristics, a more specific analysis is needed in order to develop an effective solid waste management program.

additional personnel. The determination of specific requirements is typically made after the characteristics of the proposed project have been identified.

Educational Facilities

The study area is served by the Santa Clara Unified School District. In general enrollment in the school district has declined rapidly, from 24,000 in 1975 to 14,000 in 1980 and a projected 12,000 in the next few years. Since 1975, ten schools have been closed; four more will be closed in June of 1981. These facilities, most of which are located in central Santa Clara, have been retained by the school district and leased out to public service organizations; they can therefore be reopened if enrollment increases.

Elementary and High Schools

Three elementary schools are located in the vicinity of the study area: Kathryn Hughes Schools in the Southwest quadrant of the study area, Montague School on De La Cruz several blocks south of the Montague Expressway, and Alviso School north of the Alviso-Milpitas Expressway. Hughes School is currently at capacity and enrollment is projected to increase at 25 students per year due to densification of the existing residential community around the school. Montague School can accommodate an increase of 200 students, while the Alviso School is operating at capacity. Two high schools serve the school district: Santa Clara High located 3.5 miles south and Buckser High located five miles south of the study area. Due to the declining enrollment, the junior high schools and high schools have been consolidated in the two high school facilities. Students in the "north of Bayshore" area are currently bussed to these facilities.

The currently proposed Lick Mill development is projected to generate 170 students. This estimate is considered to be high by the school district based on past experience with condominium development. Those students could be assimilated into Montague School. (Sidewalks along Montague and a signal and crossing guards at Montague and De la Cruz will be required to avoid the need for bussing students across Montague. However, if both the Agnews Hospital site and the Fairway Glen Golf Course are developed at moderate residential densities, Montague School's excess capacity may be exceeded. In that case, three alternatives are available to the school district: 1) expand the schools in the vicinity; 2) bus students to schools with excess capacity in central Santa Clara; or 3) reopen the Agnew School which is located in the southwest quadrant of the study area.

Reopening Agnew School is the least attractive alternative. It was closed five years ago because of the severe airport noise problem (it is located within the CNEL 70 contour). It is currently leased to the Santa Clara Police Department until 1984 and is used as a police academy. Since the noise level is projected to increase, the site remains undesirable as

a school facility. Busing would increase operating costs. Busing or expansion of other schools serving the study area are preferred alternatives. Existing facilities could be expanded by the use of portable classrooms owned by the school district and presently used as offices or continuing education facilities. In contrast to the relatively low cost of this approach, construction of permanent additions would cost an average of \$100 per square foot or \$100,000 per 30-student classroom.

Mission College

The Mission College campus of the West Valley Joint Community College District is located on Mission College Boulevard southwest of the study area. It serves Santa Clara, Saratoga, Campbell and portions of San Jose, i.e. areas southwest of the campus. Enrollment during the Fall semester, 1980 was 6,000 and during the Spring semester, 1980 it was 8,000. Only the "central core" of the college has been built to date; plans call for the addition of four additional structures. A request for funding of the first of these structures has been submitted to state funding sources. The addition of this facility is expected to accomodate a 29% increase in enrollment.

Police Academy

A police academy, operated by the San Jose Community College District and serving police departments in jurisdictions throughout Santa Clara County, is located at the former Agnew School site. The facility is leased by the Community College district until 1984 with a renewal option. The facility is located within the CNEL 75 contour and concern regarding the impact of noise on the facility's operation has been expressed by program administrators. Alternative sites, such as other unoccupied schools, might be considered as a solution to the noise problem except for the fact that a hazardous driving track was constructed at the Agnew School site a few years ago. The track, which cost close to one-half million dollars in 1976, was funded by the federal government with the understanding that it would be used for "a reasonable period of time." The police academy could be relocated if a new driving track could be financed.

VI. MARKET CONDITIONS

This section summarizes the market analysis of the study area prepared by Economic Research Associates. That analysis, entitled "Overview of Potential Land Uses", is a companion document to this report. The following summary examines the types of land uses considered appropriate for the Guadalupe West Study Area. These uses are diverse and not necessarily complementary at one site, regardless of its size. Based on a review of general area market trends and opportunities, this discussion will identify the land uses that should be examined in greater detail for potential site development.

Convention Center and Sports Arena

A sports arena facility is a viable land use within the study area. Planning for such a facility should be pursued now if project completion is to be expected by mid-1980s (when the Warriors are available for relocation).

The development of convention and arena facilities in Santa Clara would reinforce the existing commercial and recreation profile of the area. In addition, it would generate spin-off economic investment potential in complementary facilities, primary hotels, specialty retail, restaurant and related entertainment components. An ERA analysis conducted several years ago deemed feasible the development of a convention center with 100,000 square feet in exhibition space and a 18,000 to 20,000 seat sports arena.

Lodging Facilities

Demand for overnight lodging is generated by three principal sources: 1. business visitors, 2. convention/group business, and 3. tourists and other visitors. The composition of demand in Santa Clara County is estimated as follows:

business	60%
convention/group	20-25%
tourists and other visitors	15-20%

The high proportion of business visitors is reflected in a high mid-week occupancy.*

Recent analyses project Santa Clara County lodging demand to expand at six to eight percent annually into the mid-

*(Major properties in Santa Clara frequently operate at 100 percent occupancy from Monday through Thursday. Weekend demand tends to drop significantly, with the exception of summer months when special rates are promoted for family and group packages.)

1980's. Given this aggregate trend which reflects growth foreseen in area population, leisure activities, and employment, the future prospects for new hotels appear healthy. The potential for additional lodging facilities is estimated at 600 to 800 rooms. Planned expansion of the Marriott Hotel by 250 rooms will absorb 30% to 40% of the anticipated demand while a plan for construction of a hotel south of Marriott's Great America on property owned by Our Lady of Peace Catholic Church will, if implemented, absorb an additional 30% to 40% of the demand.

The proposed Santa Clara Convention Center and Sports Arena would stimulate the development of one or two adjacent hotel properties which would in turn support other visitors to the subject area, especially as commercial uses are developed.

Recreation

The existing image of the area and travel patterns would support other types of recreational development. Adequate space for parking, the existence of a commercial recreational hub (Marriott's Great America), and community support for a sports arena all reinforce the development complementary recreational facilities including:

- an aquatic park - focusing on water-oriented amusement rides;
- a family recreation center - miniature golf, "Malibu Grand Prix" race car track, electronic game arcade, batting cages, etc.
- a golf course - relocation of the existing public 18-hole course or development of an executive course, perhaps integrated with housing.

Housing

Limited housing supply is a crucial concern in the Bay Area, particularly in Santa Clara County. Most remaining land in the North County cities, including Santa Clara, is scattered in small parcels not suitable for extensive housing development. Compounded by the current imbalance between jobs and housing in Santa Clara and other North County cities the Guadalupe West study area stands out as a particularly desirable location for housing development. Of course, the addition of housing in the Guadalupe West area alone will not solve the job/housing imbalance. It is a regional problem which requires the cooperation of all jurisdictions in Santa Clara County.

In short:

- o The site is a major north county parcel suitable for housing construction with strong potential for multi-family development.
- o The location is politically appropriate for multi-family housing. The location east of Highway 101 is less likely to attract opposition than multi-family housing development in a more central location.
- o Because the housing shortage will hinder employment growth, affordable new housing would stimulate a potentially stagnant economy.

Industrial and Business Office Park

Recent data collected on major industrial parks in the South Bay Region indicate that this activity has slowed significantly during the last 12 months. High money interest rates, increasing concerns about availability of affordable housing for the labor force, and increased competition in domestic semi-conductor markets appear to be the causes. Nevertheless, the Guadalupe West area has many advantages, enabling it to compete with existing and new business or industrial parks for high technology manufacturing:

- o high visibility
- o good environmental quality
- o excellent access
- o strategic centrality.

Together, these assets suggest that the Guadalupe Area would attract firms seeking expansion of administrative and research/development offices in the South Bay Region while relocating their production and marketing functions to other locations throughout the West.

A high technology business park of the highest environmental quality - a "headquarters location" - is appropriate for 150 to 250 acres if the following concerns can be resolved:

- o improved mass transit - by bus and/or light rail; perhaps in conjunction with the Guadalupe Corridor; providing for linkages with the Southern Pacific Railroad which plans rail service expansion on its existing line under contract to CALTRANS; adequate parking must also be provided.
- o additional housing - from the marketability standpoint alone, it would be advisable to develop condominiums and/or multiple rental housing in significant amount elsewhere on the Guadalupe West site; perhaps as a requisite to office space development.

The "campus type" business park would employ an average of 40 persons per acre. A 250-acre industrial development could result in an increased housing demand of 10,000 units.

Retail

The type and scale of retail development in the study area is largely dependent on the type and planning of other development in the area. However, there is currently a shortage of neighborhood commercial facilities in the area so that a demand for neighborhood commercial development exists regardless of future development. Moreover, a regional shopping center does not appear feasible given the existing proliferation of such centers in the South Bay Area and the limited population north of Highway 101.

The following retail developments appear feasible subject to the development of supporting land uses:

- o neighborhood shopping center - 40,000 to 70,000 square feet or more with a supermarket anchor and related shops and services oriented to residents in the immediate area - depending on the amount of additional housing developed in the study area.
- o service retail - 20,000 to 40,000 square feet adjacent to office development comprised of several restaurants, retail and services, perhaps including a bank, travel agent, drug store, dry cleaners and the like to be used by officeworkers if industrial/office development occurs.
- o specialized retail - 50,000 to 100,000 square feet as support for a convention center and sports arena, gaining strength as hotels are concurrently developed within the project area.

VII. PLANNING AND REGULATORY CONTEXT

A variety of planning policies and regulations affect land use development in the study area. At the County level the major policy affecting development is the achievement of a balance between jobs and housings within the County. This policy suggests the need for additional housing in the City of Santa Clara to balance with its excessive job supply.

The City's plans for the area are being evaluated through this study. Its results will serve as the City's revised land use plan for the area.

At the regional scale, the Association of Bay Area Governments provides a regional planning framework. The Bay Conservation and Development Commission (BCDC) has no jurisdiction over this area while the role of the Army Corps of Engineers is uncertain (see detailed discussion below).

Air Quality

The Bay Area Air Quality Management District has responsibility to monitor and enforce State air quality standards. Planning for compliance with Federal standards has been assumed in part by the Association of Bay Area Governments (ABAG) which, together with the Air Quality Management District, prepared an Air Quality Management Plan (AQMP). The AQMP lists a variety of measures that should be adopted by local governments to increase air quality. Measures relevant to development of the study area include: provision of additional transit service, increasing bus and carpool lanes, provision of ride-sharing services, and development of bicycle systems to reduce motor vehicle emissions; development of unimproved land within urban services areas where urban services exist or are committed in capital improvement programs; increasing housing and job opportunities in existing urbanized areas by encouraging public and private rebuilding into compatible mixed commercial, industrial and residential land uses; encouraging infill of bypassed vacant land within urban service areas; development at higher densities within service areas where existing or committed service capacities can support the higher densities; improving the balance of jobs and housing to reduce the necessity for long-distance home-to-job travel; discouraging new large scale land development projects that are exclusively commercial, industrial or residential, unless they clearly improve the overall jobs-housing balance.

Airport Noise

A CNEL 75 or higher is the federal guideline used in the "Aviation Noise Abatement Policy" by the FAA, as well as in FAA Order 5100.33 28. In both documents, the CNEL 75 exposure is considered to be severe and not suitable for most types of urban development. Likewise, the CNEL 65 cutoff

point is based on FAA Order 5100.33, which specifically refers to CNEL 65 as a "significant aircraft noise level," one that must be considered in land use compatibility studies.

According to the California airport "Noise Standards," the level of noise acceptable to a "reasonable" person residing in the vicinity of an airport is CNEL 65. This criterion was chosen for persons residing in urban residential areas where houses are of typical California construction and may have windows partially open. The CNEL 65 level was selected with reference to speech, sleep, and community reaction. The time schedule established in the California airport "Noise Standards" to achieve a "zero noise impact" area within the applicable CNEL contour is shown in Table 8.

Table 8

CALIFORNIA AIRPORT NOISE STANDARDS:
CNEL VALUES AND DATES OF COMPLIANCE

<u>Date</u>	<u>CNEL^a in contour decibels</u>
Effective date of regulations to December 31, 1975	80
January 1, 1976, to December 31, 1980	75
January 1, 1981, to December 31, 1985	70
January 1, 1986, and thereafter	65

a. Community noise equivalent level (see text).

Source: State of California, Administrative Code, "Noise Standards," Title 4, Chapter 9, Subchapter 6.

The stated purpose of these standards is to provide a basis for resolving existing noise problems in communities surrounding civilian airports (military aircraft operations are excluded from the regulations) and to prevent the development of new noise problems. All existing and future airports in California are subject to the regulations.

Along with several other major California airports, San Jose

Municipal Airport has not met the second stage (CNEL 75) noise impact reduction requirement that is currently applicable. The City of San Jose is acquiring residential properties in the Coleman Loop, which is subjected to CNEL 75, but completion of the program will be later than the compliance date shown in Table 7. When acquisition is completed, compliance with the CNEL 75 will be achieved within the City of San Jose, but not within the City of Santa Clara.

Another State regulation is the "Noise Insulation Standards". The application of the California "Noise Insulation Standards," which can be adopted as part of the local building codes, is concerned with residential structures (excluding single-family detached) located in noise-critical areas (defined as CNEL 60-or-greater) such as those near airports. Once the regulation is adopted, new residential structures must be designed to prevent the intrusion of exterior noises so that, with all exterior doors and windows closed, the noise level attributable to exterior sources does not exceed an annual CNEL 45 in any habitable room. Proper design to achieve this standard can include, but is not limited to: orientation of the structure; setbacks; shielding; and sound insulation of the building itself. The California "Noise Insulation Standards" specify minimum insulation standards in terms of Impact Insulation Class (IIC) and Sound Transmission Class (STC) for wall and floor-ceiling assemblies.

Vegetation and Wildlife

The corridor is within the jurisdiction of several local governments, and State and Federal agencies. The major goals, policies, and/or guidelines involving protection of biological resources for each are briefly described below.

The United States Army Corps of Engineers. The U.S. Army Corps of Engineers may have permit authority for construction activity in streams within the corridor under Section 404 of the Federal Water Pollution Control Act (FWPCA) of 1977. Under Section 404 of the FWPCA, a permit would be required for all discharges of dredged or fill material in waters of the United States, including adjacent wetlands. Therefore, a permit may be required from the Corps for any fill in certain areas of the Guadalupe River in which vegetation characteristics of wetlands exists under the criteria of Section 404.

In evaluating projects which involve the placement of fill on wetlands, the Corps thoroughly examines the project for its environmental effects. The Corps relies heavily on comments from other Federal and State agencies in this evaluation, including the U.S. Department of Fish and Wildlife and the California Department of Fish and Game.

California Department of Fish and Game. The California

Department of Fish and Game has authority regarding all stream crossings under Section 1601-03 of the Fish and Game Code. Notification of the proposed channel modifications for any bridge crossings or other development of streams must be submitted to the Department of Fish and Game. Agreements specifying construction measures protecting streambeds and riparian vegetation must be executed before construction can begin. In addition, through responsibilities described in the U.S. Fish and Wildlife Coordination Act of 1958, the State Wetlands Protection Policy of 1977, and permit review procedures for the U.S. Army Corps of Engineers, the department has input into the review processes of other agencies.

U.S. Fish and Wildlife Service (FWS). Under the Fish and Wildlife Coordination Act, the FWS assesses the impacts on fish and wildlife of all water and related land resource development projects which are federally funded or are constructed under a Federal permit or license and to provide reports to the appropriate construction or regulatory agency. The FWS is also specifically to be consulted before the issuance of a Section 404 permit by the U.S. Army Corps of Engineers. Concerns of U.S. Fish and Wildlife are similar to those discussed above under California Fish and Game.

Parks and Recreation

In addition to the county park site north of the study area, the County General Plan designates the following recreational facilities in the vicinity of the study area: a trail along the Guadalupe River, a trail along the San Tomas Aquino Creek, and a trail along the Hetch Hetchy Aqueduct linking Coyote Creek, San Tomas Creek, and the Guadalupe River with the Baylands Park.

To link the trail system to the County Park site, a pedestrian corridor parallel to and south of Highway 237 from the Guadalupe River to Lafayette Street is proposed. A pedestrian crossing at the intersection of 237 and Lafayette would be required.

VIII. DEVELOPMENT PROPOSALS

A number of development plans, both public and private, are under consideration or have been proposed for the study area.

Lick Mill Residential

A condominium development at a density of 29.5 dwelling units per gross acre is under consideration for the 27.5 acre Lick Mill site which includes the historic Lick Mansion. Under the plan, for which an EIR has already been prepared, the four-acre historic trust zone surrounding the mansion would be preserved. The City has approved rezoning of the site to accomodate the development of 819 units.

Residential Development of Agnews Hospital Site

A portion of the Agnews Hospital site east of the existing facility is being evaluated, at the request of the State, as a location for affordable housing. the site consists of approximately 70 acres and is expected to be developed at a density of 15 to 20 units per gross acre.

Fairway Glen Golf Course

It has been suggested that the existing 105-acre Fairway Glen Golf Course be replaced, at least in part, by residential development at a moderate density. The golf course would be relocated to the existing land fill site. The proposal has no official status.

Sports Arena and Convention Center

The development of a sports arena/convention center facility has been proposed in the northwestern portion of the study area. The facility would include an indoor arena capable of accomodating an NBA basketball team. Complementary facilities would include a convention center and hotels.

Guadalupe Transportation Corridor

The development of a public transit facility along a 16-mile northwest to southeast corridor from Marriott's Great America at the northwest to IBM/Edenvale Industrial Parks at the southeast extreme is currently under study by the Santa Clara County Transit District. While several transit modes/routes including busway/high occupancy vehicle lanes, light rail exclusive corridor, busway/freeway or expressway, light rail/expressway, and commuter rail were identified as alternatives, the light rail alternative has been evaluated in detail.

As currently proposed, the route would run from east to west through the study area, terminating at the intersection of Tasman Drive and Great America Parkway. However, it has been suggested that this northwestern portion is not developed at a sufficient intensity to support the transit corridor. The extension of the corridor northward to the

Lockheed industrial facility just south of Moffett Field has been proposed as a means of increasing the population to be served. This modification might require relocation of the corridor outside of the study area.

IX. URBAN DESIGN RESOURCES AND CONFLICTS

Integrating the large, marginally developed parcels of the study area into a coherent community will involve two important tasks: first, capitalizing on existing design resources; and second, overcoming physical obstacles to the integration of various parts of that community. See Figure 11.

Open Space Amenities

Primary among the design resources of the site are the ample open space amenities including:

- o the river channels and levees
- o the Hetch Hetchy aqueduct corridor
- o the two existing public parks (one developed and the second budgeted for 1981).

These recreational and visual resources are important assets that can improve the value of adjacent property and fulfill regional purposes in the county-wide trail system. Maximizing the linear exposure to these resources will increase their community benefit. Landscape development of the Hetch Hetchy corridor could substantially enhance the residential neighborhoods as well as provide an important visual connection between the two natural water courses.

In addition to the existing public open space, Agnews State Hospital functions visually as a significant open space amenity. The sparsely developed campus with groves of mature trees will remain a positive contrast to the potential development that could fill in the surrounding under-utilized land. The double row of Canary Island Palm trees that line Palm Drive, the entrance to the hospital, is a strong visual identification for the hospital and one of the clearest, most recognizable, visual patterns in the study area. Indeed the trees of Agnews State Hospital, together with the few remaining water towers, are important landscape elements that orient the visitor from some distance.

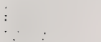
Focal Points

The Tasman Drive/Lafayette overcrossing is perhaps the most monumental focal point in the study area. The scale of the overcrossing presently dwarfs all adjacent development and needs to be brought into appropriate scale with any future plans. Scaling structures to the existing embankment without dwarfing the pedestrian will be a formidable task.

The water storage tanks adjacent to the Hetch Hetchy aqueduct are also monumental in scale but potentially less of a visual problem since they are more isolated at the perimeter of the site. The PG&E overhead lines form difficult scale relationships as they pass through the residential neighborhood. Matching an appropriate ground

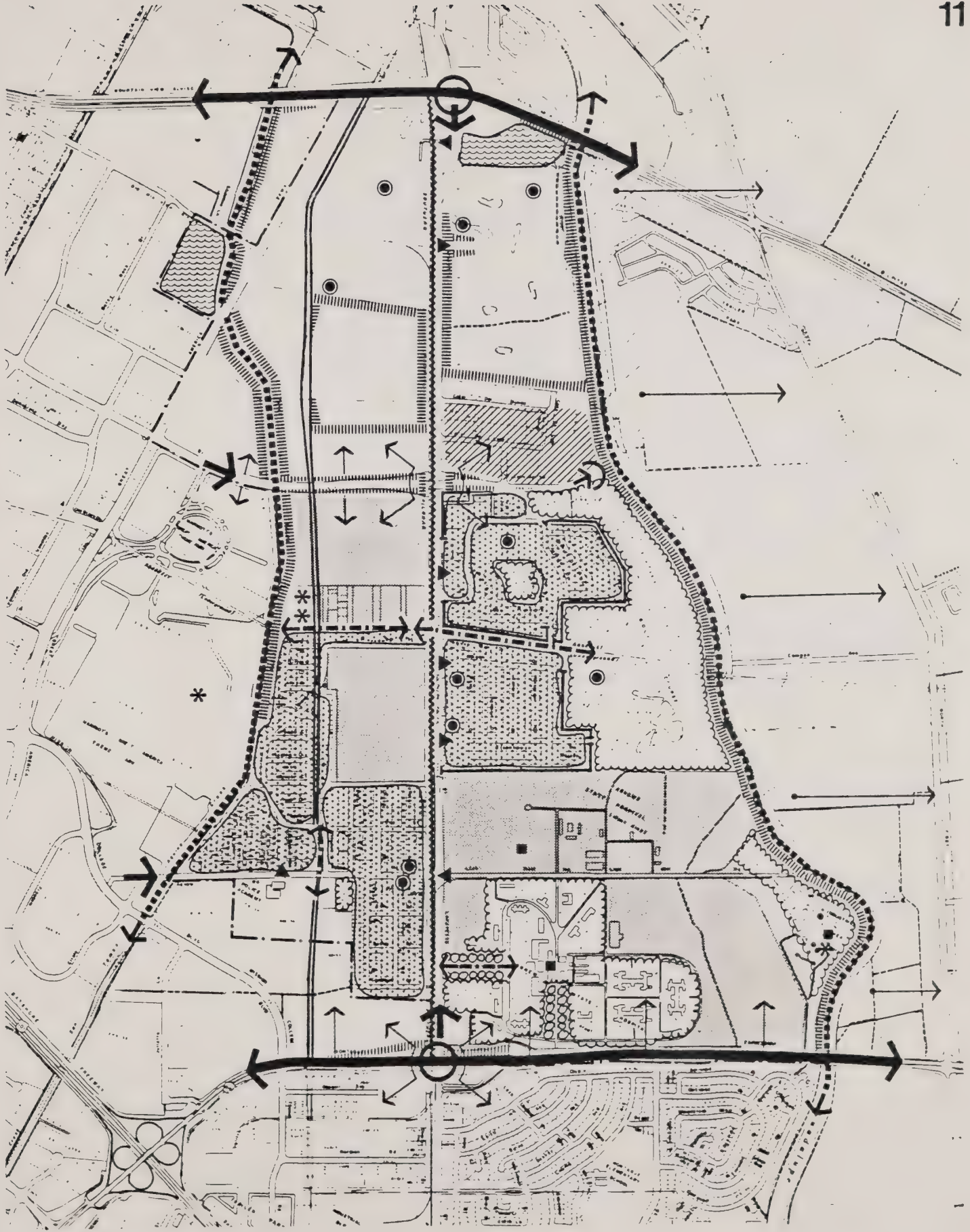
Figure 11 URBAN DESIGN RESOURCES

VISUAL UNITS

	Underutilized Open Space
	Landscaped Park or Open Space
	Formalized Open Space
	Pond
	River Corridor
	Focused View Corridor
	Residential Neighborhood
	Industrial Development

LANDSCAPE FEATURES

	Controlled Access Road
	On-Grade Barrier
	Topographic Barrier
	Overhead Power Line
	Fence
	Cultural Landmark
	Visual Focal Point
	Activity Node
	Major Interchange
	Study Area Entry
	Sub Area Entry
	Elevated View
	Long Range View
	View



plane use to these lines will be important to subsequent development.

Smaller scale focal points can be identified at the hospital administrative building and the Lick Mansion. Both structures have historical merit. The Lick Mansion is restored and will be protected under current development proposals.

Creating more functional, community-oriented focal points will be important to any development plans. Integrating these centers with commercial and recreational developments is essential to give them the activity necessary to "bring them to life."

Barriers

Perhaps the most significant of the design conflicts to be resolved are the many physical barriers that subdivide the study area. The most formidable, perhaps, is the SP railroad right-of-way paralleling Lafayette Street. This barrier effectively divides the study area in two, strongly limits automobile access to the westerly portion, and discourages any pedestrian linkages.

The fill slope that supports the Tasman Drive overcrossing at Lafayette presents a more powerfully visual barrier between the northern and southern sectors of the site. At the same time, the superstructure provides the opportunity for future integration of each quadrant of the study area.

Views

The entire study area enjoys striking views of the mountains directly to the east. Other identifiable objects include the roller coaster and other rides at Great America, the large water tanks along the Hetch Hetchy aqueduct, and the Lick Mill water tower.

More distant views are available from the Tasman/Lafayette overcrossing. At this elevation, distant views to the Baylands are uninterrupted.

X. DEVELOPMENT AND CONSERVATION IMPLICATIONS

Strong development markets in Santa Clara county make any of a number of options feasible for the Guadalupe West study area. Together with the planning and regulatory policies discussed in Section VII, the unique attributes of the area circumscribe the choices to some extent.

Landfill

The entire area north of Tasman Drive is presently programmed for landfill. The City has applied to the U.S. Department of Energy for financing of a fluidized-bed/incineration/electric generating plant but no response has been received. The County-wide Solid Waste Plan suggests the development of a remote landfill site to be utilized jointly by Santa Clara, Milpitas, and San Jose. Furthermore, an aggressive recycling program could reduce the amount of landfill material produced by the city by as much as 80%. Development of any of these alternatives would permit the city to explore other development options for the Guadalupe West landfill sites.

The development of a transfer or recycling facility at the site, while not physically large, would require buffering from adjacent land uses and controlled vehicular access.

Freeing the unfilled land from proposed landfill operations would make a significant area, 145 acres, available for immediate development. The area already filled, 139.5 acres, could be developed as a golf course or other permanent open space. More intensive use is precluded for the short and mid-range future until the site has settled completely.

Traffic Limits

The highways surrounding the study area are all presently operating at capacity. This factor imposes the strongest constraint on development of the Guadalupe West Study Area. Unless existing highways can be expanded to accomodate additional traffic, development potential of the area may be a function of the amount of public transit that can be provided to the area.

Intensity of Land Use Along Transit Route

It will be necessary to structure development within the Guadalupe West study area to provide sufficient intensity along the transit route, and especially at the transit stations, to support the public improvements in mass transit. The fixing of that route, then, is crucial to the appropriate plan of development. The significant amount of vacant acreage at the site increases the opportunities for matching a route with an appropriate development intensity. This is a significant advantage to development at Guadalupe West.

Mixed Use Development

County policies stress the need for housing development in an effort to offset the current housing/job imbalance. However, much of the study area is impacted by the noise generated by the Municipal Airport and unsuitable for housing.

The lack of neighborhood shopping available to the existing residential areas as well as the importance of integrating commercial development with residential to reduce traffic suggests that commercial development should be integrated into the plans. The remaining development focus could be office commercial, an arena and/or convention center (perhaps combined with a hotel), or recreational development.

Whatever the major focus, an integrated mixed-use development is necessary to capitalize on marketing compatibilities as well as meet the physical requirements of the site characteristics and intensity of development appropriate to a transit corridor.

Integration with Natural Features

A significant feature of the study area is its position between San Tomas Creek and the Guadalupe River. These two important natural drainage channels have both been identified as parts of the Santa Clara County Trails System. An important asset to conserve is the uninterrupted free access to and along these riparian corridors. Maintaining a barrier free cross-connection for hiking and bicycling along the Hetch Hetchy aqueduct is also an important objective supported by policies in the Trails and Pathways Master Plan.

While the riparian corridors retain regional significance as part of a trail system they are important open space amenities for the land immediately adjacent. It should be an important objective of any development plan to knit together the natural features of the water-ways with the adjacent development to achieve a unified landscape unit. Achieving the unity will reinforce the visual and aesthetic benefits available to the adjacent lands while strengthening the ecological viability of the riparian zone.

Sub-Area Development Issues

The study area can generally be subdivided into the following areas for more detailed attention to development issues. See Figure 12.

- I. South East quadrant (Agnew Lands/Fairway Glen Golf Course)
 - o Potential for housing
 - o Requirements for careful integration with existing neighborhoods
 - o Potential traffic impacts on existing neighborhoods

- o Opportunities for river access
 - o Requirements for storm drainage improvements.
2. South West quadrant
- o Airport Noise problems
 - o Requirements for careful integration with existing neighborhoods
 - o Potential traffic circulation difficulties
 - S.P. R.R. barrier
 - connection to Guadalupe corridor
 - connection to Tasman Drive
 - o Opportunities for creek access and Hetch Hetchy aqueduct trail
 - o Overhead power lines constraint.
3. North East quadrant
- o Land fill constraints
 - o Requirements for flood control improvements
 - o Potential traffic impacts
 - o Opportunities for river access.
4. North West quadrant (Flea market area)
- o Land fill constraints
 - o Requirements for flood control improvements
 - o Potential traffic impacts and circulation difficulties
 - S.P. R.R. barrier
 - connection to Guadalupe Corridor
 - connection to Tasman Drive
 - o Overhead power lines constraint.

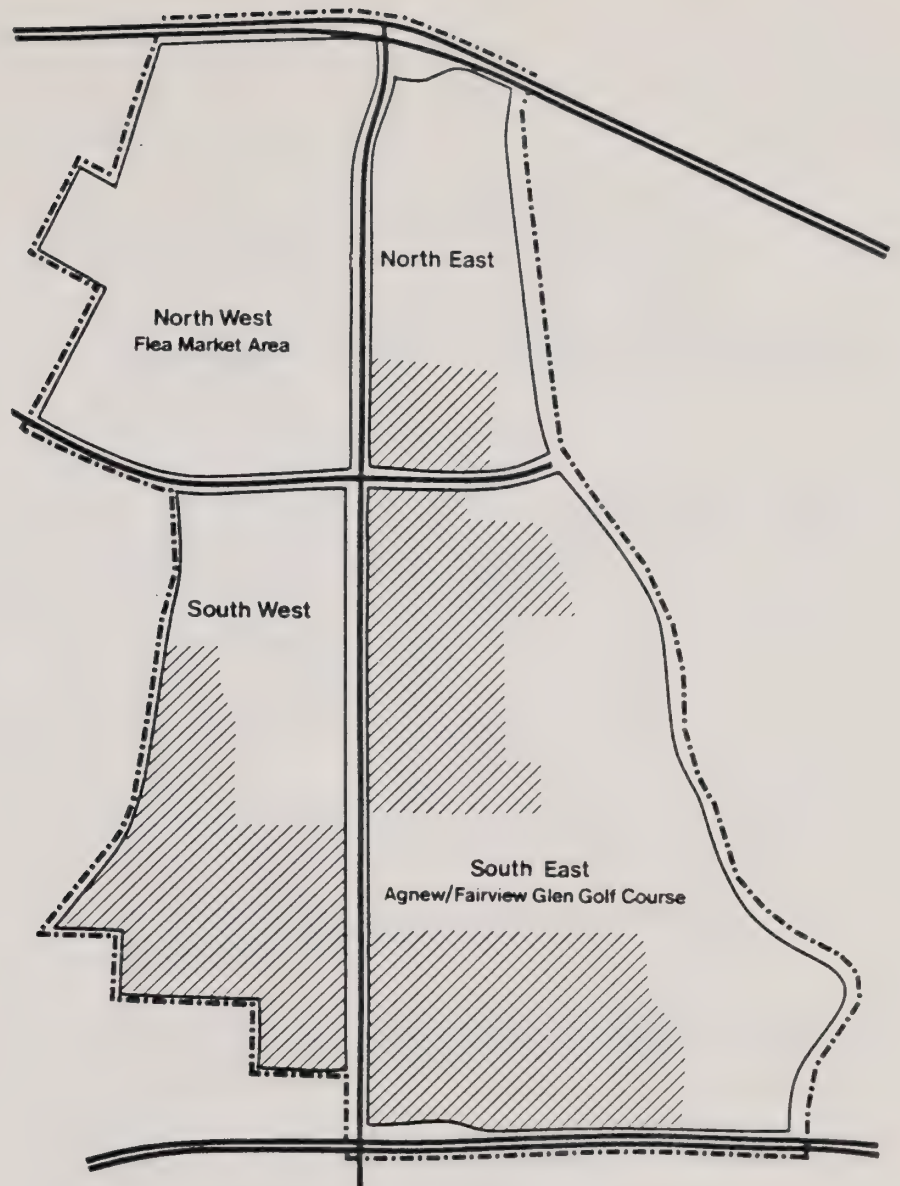
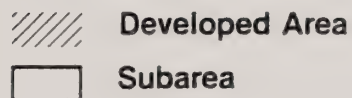


Figure 12 SUBAREAS



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APPENDIX I.

PRELIMINARY MARKET ANAYSIS:

OVERVIEW OF POTENTIAL LAND USES

By

Economics Research Assoc.

With

Sedway/Cooke



City of Santa Clara, California

Economics Research Associates



Los Angeles, California
San Francisco, California
Orlando, Florida
Chicago, Illinois
Boston, Massachusetts
Dallas, Texas
Washington, D.C.

APPENDIX

GUADALUPE WEST PLANNING STUDY
PRELIMINARY ASSESSMENT
MARKET ANALYSIS: OVERVIEW OF POTENTIAL LAND USES

Prepared for:

THE CITY OF SANTA CLARA

Prepared by:

ECONOMICS RESEARCH ASSOCIATES

In Association with

SEDWAY/COOKE
Urban and Environmental
Planners and Designers

January, 1981

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Section I

OVERVIEW OF POTENTIAL LAND USES

Because the Guadelupe West area is the last major remaining available property on the peninsula, planning its further development is important; its future uses will reflect strongly on the overall image and economic value of Santa Clara as well as generate public service demands--sewer, traffic that will alter the current status of city and regional service responsibilities.

This section examines the types of land uses potentially considered appropriate for the subject area. These uses are diverse and not necessarily complementary together at one site, regardless of its size. Through a review of general area market trends and opportunities, this discussion will help focus on the land uses that should be examined in greater detail for potential site development.

CONVENTION CENTER AND SPORTS ARENA

Certainly the proposed Santa Clara Convention Center and Sports Arena would be a major focal point of the overall Guadelupe area development. An ERA analysis was conducted several years ago deeming feasible the development of a convention center with 100,000 square feet in exhibition space with 20,000 square feet of meeting rooms and an 18,000- to 20,000-seat sports arena.

Such projects are very expensive and normally financed through public means, primarily voter-approved bonds. But as Santa Clara has committed to obtaining private sector financing, the project has taken on a more challenging perspective and consequently, has not yet acquired a project developer despite receiving various proposals over the last two or three years.

In recent months, however, the Chamber of Commerce has received three relatively serious development proposals, most notably from The Forum in Los Angeles with whom the consultant team has met. This particular proposal seems more feasible than the others received to date since The Forum currently owns and/or manages several facilities and professional sports teams.

Accordingly to Bob Goldberg, a Forum representative, facility development is necessary within the next 18 months to house the Warriors NBA team (who supposedly need to move by this time) and The Forum's NHL hockey team from Seattle; certainly a sports arena is optimally viable if two professional sports teams can be contracted. However, an ERA discussion with the Warrior's management reflects discrepancy with this suggested time frame for arena development.

Scotty Sterling, the manager of the Warriors, has not been contacted at all by The Forum (although other potential developers have called in the past) nor are the Warriors seeking a new facility within 18 months. The team is committed to Oakland through the 1984-1985 season yet maintains strong interest in a new arena beginning with the 1985-1986 season. In addition to NBA basketball, the San Jose Earthquakes, a professional soccer team with growing support, maintain interest in a new arena. Despite the demise of the Pacific and World Hockey leagues since the time of ERA's earlier analysis, securing hockey on a NHL level remains important. A sports arena seems more viable if a group like The Forum is involved in the project.

Given these factors, the development potential for a sports arena remains feasible, although not for the immediate future as suggested by The Forum. However, planning for such a facility should be pursued now to ensure project completion by the mid-1980s--when the Warriors are available for relocation.

Such a planning schedule is also appropriate for the proposed convention center. To date, no new facilities have entered the regional marketplace although Moscone Center in San Francisco is scheduled for completion next year. Since this facility was anticipated when the previous ERA study was conducted, the general market potential for convention facilities in Santa Clara remains untapped. As the regional economy, particularly the electronics industry, continues to expand in the Santa Clara area and general convention activity continues to grow as illustrated in Table I-1, the need for major exhibition and meeting space becomes more pressing for the Santa Clara/San Jose region as reflected in the City of San Jose's current interest in developing a downtown convention center and arena complex. The timing and scale of these plans must be observed. However, the development of convention and arena facilities in Santa Clara would reinforce the subject site's eminent commercial and recreation profile as currently maintained in the South Bay Area. In addition, it would generate spin-off economic investment potential in complementary facilities, primarily hotels, specialty retail, restaurant and related entertainment components.

LODGING FACILITIES

Until very recently, hotel development in Santa Clara County has lagged behind the rapid and dramatic growth of the regional economy. In earlier years, most of the county's overnight accommodations were situated along El Camino Real, principally in smaller properties of less than 100 rooms. The first major quality facilities were Rickey's Hyatt House in Palo Alto, and somewhat later, the Cabana, 200-room hotel across El Camino Real, which is now also operated by the Hyatt Corporation. These two hotels served as a hub for businessmen visiting the newly emerging high technology concentrations in Palo Alto during the 1950s and 1960s and still enjoy high occupancies composed principally of business travelers.

Table I-1

COMPETITIVE LODGING SUPPLY

<u>MAJOR COMPETITIVE PROPERTIES</u>	<u>Location</u>	<u>Number of Units</u>
Rickey's/Cabana Hyatt Houses	Palo Alto	550
Holiday Inn	Sunnyvale	200
* Hilton Inn	Oakmead Village	305
* Sheraton Inn	Moffett Industrial Park	170
* Marriott Inn	Santa Clara	500
Ramada Inn	Santa Clara	132
San Jose Hyatt House	Airport Vicinity	475
Holiday Inn	Airport Vicinity	200
Le Baron Hotel	Airport Vicinity	340
Holiday Inn	Downtown San Jose	240
* Red Lion Inn	Airport Vicinity	<u>505</u> ^{1/}
	Subtotal	3,617
 <u>PROPOSED PROPERTIES</u>		
Marriott Expansion	Santa Clara	250
St. Claire Expansion	Downtown San Jose	300
San Antonio Project	Downtown San Jose	500

* Post 1978 construction; (200 rooms at Marriott).

1/ Will open in late 1981.

Source: Economics Research Associates

With the development of significant levels of high technology uses along the Highway 101 corridor, hotel/motel development followed. The earliest hotel properties in this area were the Holiday Inn at the Lawrence Expressway interchange in Sunnyvale and the Ramada Inn at the Montague Expressway in Santa Clara. Further south, the Hyatt House on North First Street and the Le Baron Hotel were followed by several smaller, economically priced hotel properties.

As industrial/business parks developed and were absorbed in Mountain View, Sunnyvale, Santa Clara and San Jose, typically between the Southern Pacific Railroad tracks and Highway 101 at first, then later to the area north of 101, nodes of activity became evident within the vicinities of major freeway interchanges.

Table I-1 summarizes the inventory of competitive lodging in Santa Clara County. Since 1978, almost 800 rooms have been added to the competitive stock, representing an 18 percent increase.

New Development

Targeted for a mid-1982 opening, the Red Lion will add another 500 rooms to the lodging supply near San Jose Airport. Oriented to business and conference travelers, this major property will satisfy alot of the currently strong weekday demand. Its proximity to the subject site area may prompt lodging spillover from Great America Park and from the proposed Santa Clara Convention Center.

Hotel investment in downtown San Jose is close to getting underway. The De Anza Hotel may be renovated. In addition, the St. Clair may pursue two phases of improvements--renovation and a 300-room expansion. A new property of 500 rooms may also be developed downtown. However, these plans have little bearing over the market potential for lodging at the subject site given their distinct and noncompetitive market positions.

Subject Site Activity

The Great America-Oakmead area is a major node of county lodging activity. Adjacent to the subject site is the Great America area which contains the Marriott Hotel, the amusement park, and the Marriott Business Park. The Marriott Hotel was a particularly significant entry into the Santa Clara County hotel market in 1976 with 300 rooms, as they effectively pioneered the move to higher room rates by exceeding the existing rate structure in the area by \$10 per roomnight. In 1979, they added 200 rooms and recently revealed plans for another 250-room tower. With a 750-room property, evidently Marriott has operated successfully and plans to maintain a major role in capturing area lodging demand growth. Across Highway 101 is the Oakmead Village Industrial Park which contains three hotel sites: the first to be developed is the Sunnyvale Hilton which is achieving very high levels of occupancy with a minimum room rate of \$55 per night. Plans for the other hotels at Oakmead Village have not fully materialized at this time.

LODGING DEMAND

Demand for overnight lodging is generated by three principal sources: (1) business visitors, (2) convention/group business, and (3) tourists and other visitors. The composition of demand in Santa Clara County is estimated as follows:

<u>Market Demand Segment</u>	<u>Share of Total Trade For First-Class Outlets</u>
Business	60%
Convention/Group	20-25
Tourists and Other Visitors	15-20

With the development of major convention and sports facilities, convention and tourist lodging demand would become more predominant segments of the Santa Clara County market.

Currently, these components of demand have generated an average annual occupancy of approximately 80 percent: well above the industry base point of 70 percent considered necessary for profitable operation. Santa Clara County hotel operators indicate that the major properties frequently operate at 100 percent occupancy from Monday through Thursday and at these peak periods, first-class travelers must frequently use secondary accommodations. Thus, midweek occupancies in those facilities which are typically less than first-class in quality are also typically high. Local operators attribute this exceptional strength of demand principally to the business traveler market segment during midweek periods. Weekend demand tends to drop significantly, with the exception of summer months when special rates are promoted for family and group packages.

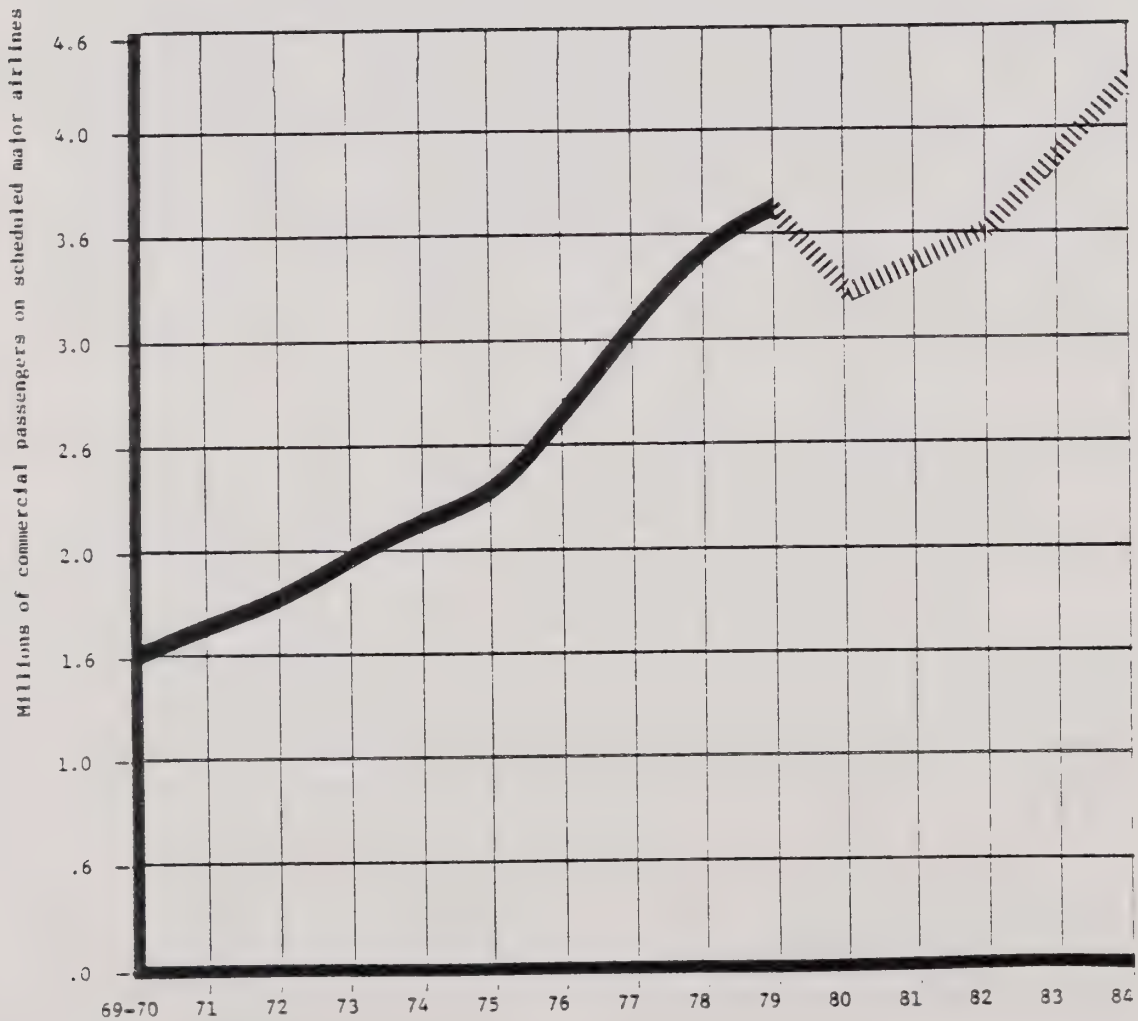
Recent Lodging-Related Trends

The currently high lodging demand is not surprising given the recent trends which reflect growing demand. Many visitors, as segmented above, travel to Santa Clara County via commercial airlines. As documented in Figure 1, commercial travel to San Jose Municipal Airport had more than doubled over the last decade. Despite a current lag (which corresponds to the nationwide recessionary impact on air travel), commercial air travel to the San Jose area is projected to rise during the 1980s.

Focusing on Santa Clara, a direct reflection of lodging demand is noted through transient room tax receipts. As illustrated in Figure 2, lodging expenditures in the city have grown over 20 percent annually, certainly outpacing inflationary increases in room costs.

Figure 1

SAN JOSE MUNICIPAL AIRPORT
COMMERCIAL PASSENGER GROWTH

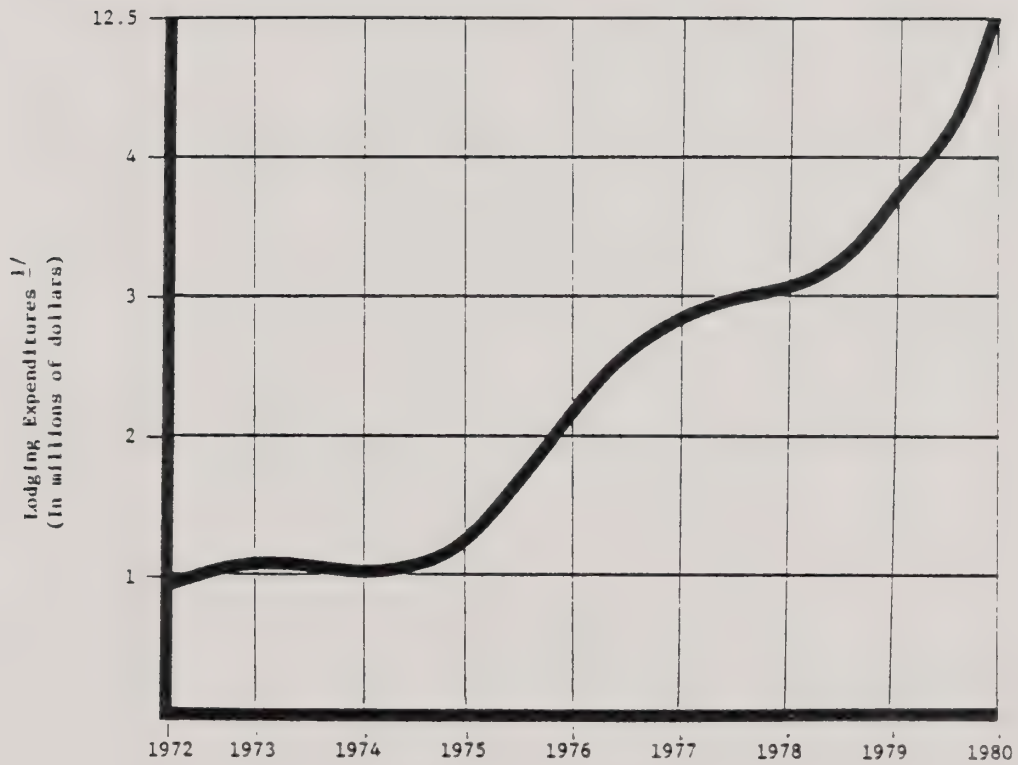


 Projected Volume

Source: San Jose Municipal Airport and Economics Research Associates

Figure 2

CITY OF SANTA CLARA HOTEL EXPENDITURE GROWTH



^{1/}1972 base year = \$2.46 million in expenditures with 22.5 percent compound annual growth. 1978-1980 revenues projected by City Department of Finance.

Source: Economics Research Associates

Future Demand Implications

Recent analyses projects Santa Clara County lodging demand to expand at six to eight percent annually into the mid-1980s. Given this aggregate trend which reflects the growth foreseen in area population, leisure activities, and employment, the future prospects for new hotels appear healthy.

As ERA has previously stated, the proposed Santa Clara Convention Center and Sports Arena will stimulate the development of one or two adjacent hotel properties, representing perhaps 600 to 800 rooms. These hotels would accommodate convention delegates and overnight arena attendees but would also support other visitors to the subject site area, especially as commercial uses are developed. Spillover weekday guests from Marriott's may be accommodated as well as general business and conference travelers to the rapidly expanding high technology industries of Santa Clara County. However, achieving high weekend occupancies may remain difficult if new properties are added.

Given this overview of area trends and prospects, the market potential for hotels at the subject site generally appears viable and should be examined in greater detail.

RECREATION

The Guadalupe West area is an established location for recreation activity with its regionally known amusement theme park and 18-hole public golf course. The development of a major convention center and sports arena would reinforce this locational identity and enhance the potential for additional recreational development. Both visitor and resident serving recreation may be accommodated within new development.

The subject site is quite appropriate for commercial recreation development. As mentioned above, the site is strongly recognized for recreation activity given the far reaching draw of Marriott's Great America Park. Consequently, site image and travel patterns regarding recreation are well set. Adequate space for parking exists and because the area is already a commercial recreation hub and community endorsed for sports arena development,^{1/} it appears that most civic concerns against site recreational development have been assuaged. Given this physical and political framework, new commercial development should complement the major existing and planned recreational anchors. For example, an Aquatic Park which focuses on water-oriented amusement rides, e.g., water slides and chutes, would be appropriate. A Family Recreation Center is another suitable entertainment facility. This type of development normally includes miniature golf, "Malibu Grand Prix" race car track, electronic game arcade, batting cages and the like. This scale of commercial development is considered viable within the overall development concept for Guadelupe West and should receive more detailed planning consideration.

Public recreation at the subject site currently includes an 18-hole golf course. Relocation of this full course or the development of an executive course are options under consideration in this analysis. If the golf course is relocated onto land fill, i.e., subject property unsuitable for more intensive development, then more optimal utilization of Guadelupe West may result.

In addition to serving as a public "good", a golf course would enhance any housing developed in the subject area. With housing tastefully clustered along the golf course, attractive open space would be provided--reducing the excess amount of open space needed for the housing itself while providing a unique and valuable amenity for marketing the housing units. If these uses are integrated, however, the integrity of the golf course must be preserved through well balanced design.

^{1/} After the completion of the 1978 ERA study, a city-wide ballot was approved which endorsed sports arena/convention center development but solely through private investment.

HOUSING

Limited housing supply is a crucial concern in the Bay Area, particularly in Santa Clara County. As housing demand is fueled by employment and population growth factors, a housing shortage is created as new supply is marginally responsive to demand because of public policies which have restricted development over the last ten years. This subsection reviews the socioeconomic forces underlying the current housing market imbalance in Santa Clara. With high regional demographic mobility and interdependence, city and county trends and needs are often intertwined and examined accordingly.

Demand Trends

Housing demand is directly influenced by regional economic activity. Dynamic employment growth has occurred in Santa Clara County due to the burgeoning electronics industry--rapidly outstripping recent research projections. Table I-2 segments area employment growth over the last decade; over 250,000 jobs were created during the seventies--two-thirds between 1975 and 1979. ^{1/} In contrast to the 1975 county projection of 225,000 new jobs between 1975 and 1990, this recent growth indicates that 73 percent of the anticipated jobs materialized within 33 percent of the time frame. In fact, the county employment estimate for 1990 should become a reality by next year. ^{2/} As extrapolated in Figure 3, ERA projects 1990 county employment to range between 700,000 and 900,000.

Although appearing less dramatic than employment growth, population also expanded briskly during the seventies. Table I-3 presents population growth by selected communities. Between 1970 and 1979, San Jose and Milpitas experienced the greatest growth while Santa Clara actually dropped in population. Future city growth to 90,000 is projected by

^{1/} Of the new jobs created since 1975, 70 percent have been within the manufacturing and service sectors, reflecting the electronics industry growth.

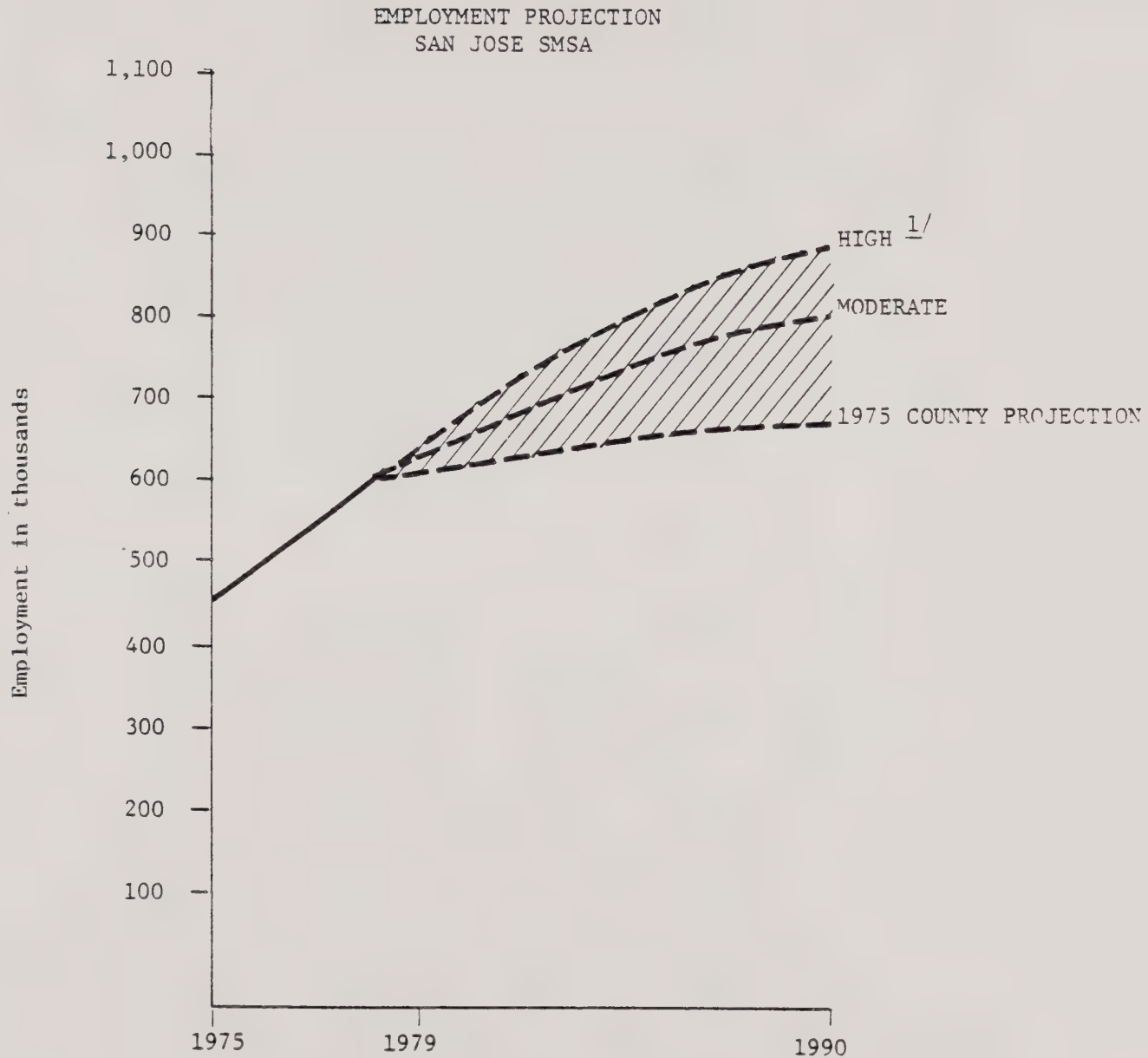
^{2/} Employment Development Department, State.

Table I-2
 NON-AGRICULTURAL EMPLOYMENT GROWTH
 1970-1979
 (Thousands)

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>Average Annual 1970-1975</u>	<u>Percent Change 1975-1979</u>
Manufacturing	121.5	117.4	124.5	144.1	158.9	151.6	164.7	174.5	197.4	221.9	4.2%	10.2%
Mining	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0%	19.0%
Construction	17.6	18.5	19.3	20.3	19.9	17.9	17.9	21.6	22.9	25.7	10.3%	9.5%
Transportation/Utilities	17.0	17.5	18.2	18.7	19.0	18.8	18.1	18.4	19.6	20.9	2.0%	2.7%
Trade	71.0	74.2	79.8	84.9	88.8	91.2	97.4	104.8	113.7	119.7	5.1%	7.0%
Finance, Insurance, Real Estate	11.1	14.0	15.8	17.1	17.9	18.2	20.0	21.6	23.5	25.7	6.8%	9.0%
Services	75.5	75.6	82.2	89.8	94.0	96.5	106.1	116.5	129.8	140.0	5.0%	9.8%
Government	<u>60.0</u>	<u>61.6</u>	<u>65.1</u>	<u>67.3</u>	<u>71.0</u>	<u>74.8</u>	<u>75.5</u>	<u>79.7</u>	<u>80.5</u>	<u>77.9</u>	<u>4.5%</u>	<u>1.0%</u>
Total	377.8	378.9	405.0	442.3	469.6	469.1	499.8	517.2	587.5	634.0	6.8%	7.8%

Source: Santa Clara County Planning Department; State of California Employment Development Department; and Economics Research Associates

Figure 3



^{1/} At two percent to 3.2 percent annual growth over 1979 base compared to 2.6 percent annual growth rate applied in the county's 1975 projection and the 7.8 percent annual growth realized between 1975 and 1979.

Source: Santa Clara County Planning Department and Economics Research Associates

Table I-3
SANTA CLARA COUNTY
POPULATION
(In Thousands)

<u>Location</u>	<u>1970</u>		<u>1979</u>		<u>1970-1979</u>
	<u>Number</u>	<u>Percent of Total</u>	<u>Number</u>	<u>Percent of Total</u>	<u>Percent Change</u>
Santa Clara County	1,065.3	100%	1,253.1	100%	17.6%
Santa Clara	87.7	8%	83.9	7%	(4.4%)
Mountain View	54.2	5%	56.3	4%	3.9%
Sunnyvale	95.4	9%	106.6	9%	11.7%
Milpitas	27.1	3%	35.4	3%	30.2%
San Jose	445.8	42%	598.0	48%	34.1%
Other County Locations	355.1	33%	372.9	30%	5.0%

Source: Census of Population 1970, State Department of Finance, and Economics Research Associates

1990, a capacity level achieved as the city is built out. Overall, county population increased by 188,000 during the seventies with future growth projected to add over 100,000 people by 1990 (see Figure 4). This population growth potential, when considered with a declining household size as illustrated in Figure 5, results in expanded housing demand. However, future population growth (and employment, to a lesser extent) will actually be constrained by the availability of housing.

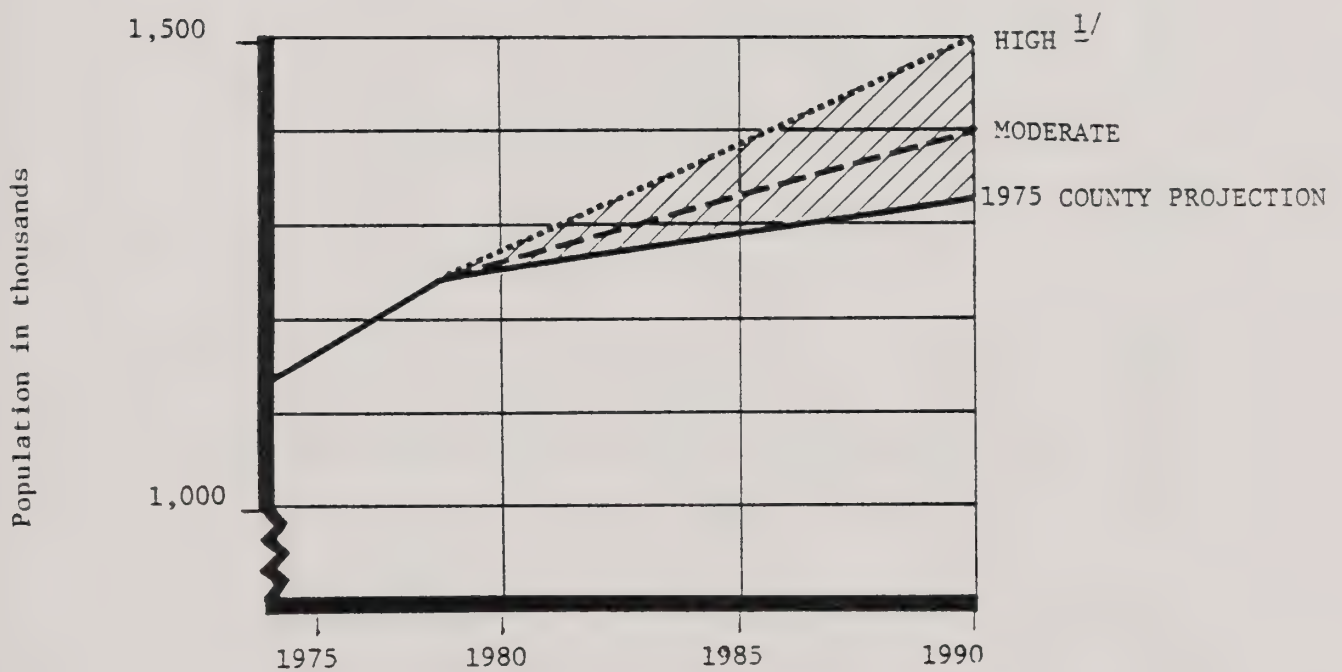
Housing Supply

Despite the accelerated growth in employment and population noted during the latter half of the decade, new housing was built at a much slower rate compared to the late 1960s or early 1970s. Table I-4 documents permits for new housing construction. Throughout the 1970s, a major shift from single-family to multi-family housing development occurred in most communities except in Mountain View where multi-family housing has consistently predominated. Between 1970 and 1974, 74,000 housing units were permitted, ranging from 1972 peak of 19,600 to a 1974 low of 9,000. During 1975 and 1979, 52,000 units were permitted, representing a 30 percent drop in the amount of housing constructed while new employment increased 80 percent over the preceding five-year period as noted below:

SANTA CLARA COMPANY INCREMENTAL GROWTH

	<u>1970-1974</u>	<u>1975-1979</u>
Employment Increase	91,800	164,900
Percent Change	--	79.6%
Population	78,700	109,100
Percent Change	--	38.6%
New Housing Units	74,000	52,200
Percent Change	--	(29.5%)

Figure 4
COUNTY POPULATION GROWTH

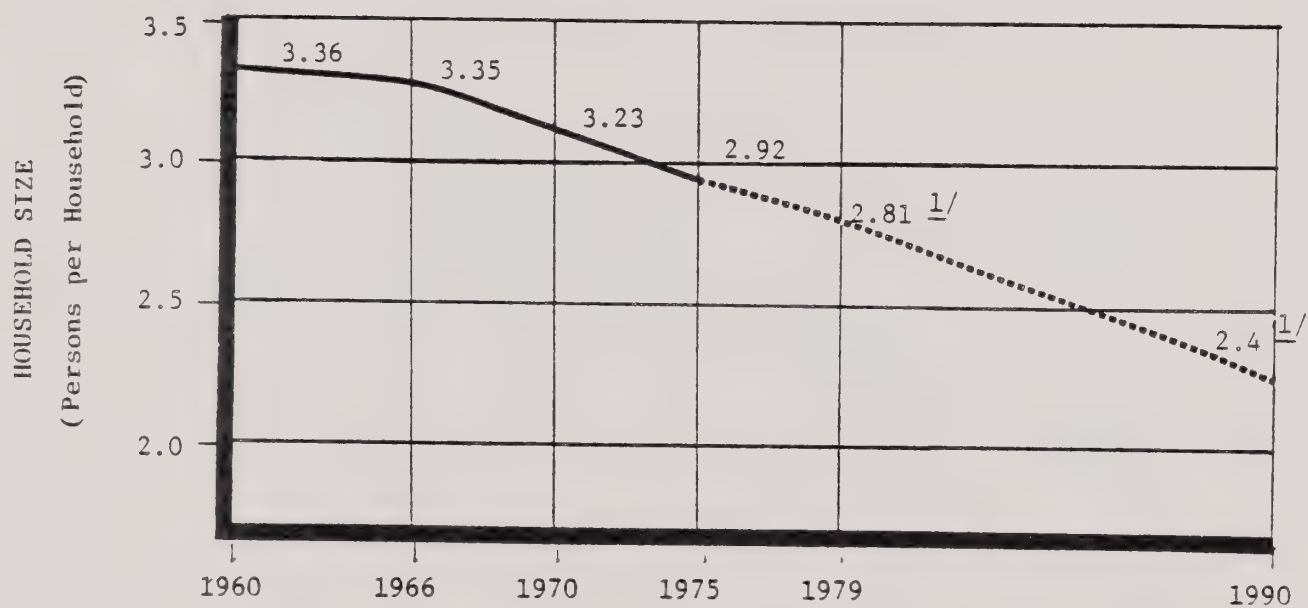


1/ ERA estimate @ 1.06 percent to 1.65 percent annual growth over 1979 base compared to 1.06 percent annual growth applied to the county's 1975 projection and the 2.3 percent annual growth realized between 1975 and 1979.

Source: Santa Clara County Planning Department and Economics Research Associates

Figure 5

HOUSEHOLD SIZE TRENDS: SANTA CLARA COUNTY
1970-1990



^{1/}Estimated average household size.

Source: Santa Clara County Planning Department

Table 1-4

RESIDENTIAL BUILDING PERMITS
NUMBER OF DWELLING UNITS

	<u>Santa Clara</u>		<u>Mountain View</u>		<u>Sunnyvale</u>		<u>Milpitas</u>		<u>San Jose</u>		<u>Other County</u>		<u>Total</u>	
	<u>Total Permits</u>	<u>Percent Multi-Family</u>	<u>Total Permits</u>	<u>Percent Multi-Family</u>	<u>Total Permits</u>	<u>Percent Multi-Family</u>	<u>Total Permits</u>	<u>Percent Multi-Family</u>	<u>Total Permits</u>	<u>Percent Multi-Family</u>	<u>Total Permits</u>	<u>Percent Multi-Family</u>	<u>Total Permits</u>	<u>Percent Multi-Family</u>
Year														
1970	1,320	92%	1,220	92%	1,782	84%	906	24%	9,516	57%	2,874	63%	17,618	64%
1971	1,334	78%	720	80%	1,407	63%	1,058	23%	10,637	44%	4,413	62%	19,569	52%
1972	288	18%	623	72%	1,211	72%	358	64%	8,011	28%	4,416	41%	14,907	38%
1973	387	76%	608	80%	1,327	62%	14	86%	7,432	38%	3,085	31%	12,853	42%
1974	774	80%	276	72%	778	81%	48	100%	5,055	23%	2,188	28%	9,064	36%
1975	511	81%	85	76%	880	78%	78	0%	4,683	23%	1,933	11%	8,170	30%
1976	844	51%	327	52%	1,085	56%	497	43%	7,342	24%	2,961	21%	13,156	29%
1977	666	56%	602	81%	540	64%	560	3%	6,603	32%	3,910	27%	12,881	34%
1978	480	49%	408	49%	318	29%	769	13%	5,401	22%	2,576	40%	9,952	30%
1979	177	44%	471	84%	301	59%	381	15%	4,644	15%	2,188	24%	8,062	24%
Total	6,781	70%	5,340	78%	9,564	67%	4,669	24%	69,324	33%	30,554	41%	126,232	41%
Percent Total	5%		4%		8%		4%		55%		24%		100%	

Source: Santa Clara County Building Department and Economics Research Associates

Growing housing scarcity is also reflected in rising prices and low vacancies. Between 1971 and 1979, the median purchase price for a new home increased 244 percent to \$83,600. Rental vacancies are virtually nonexistent at a county level with 1979 vacancy level at 1.9 percent compared to 7.7 percent in 1970s. The City of Santa Clara experienced a 3.9 percent vacancy level in 1975, primarily within rental units. Continuation of these trends suggest a growing imbalance between jobs and housing county-wide.

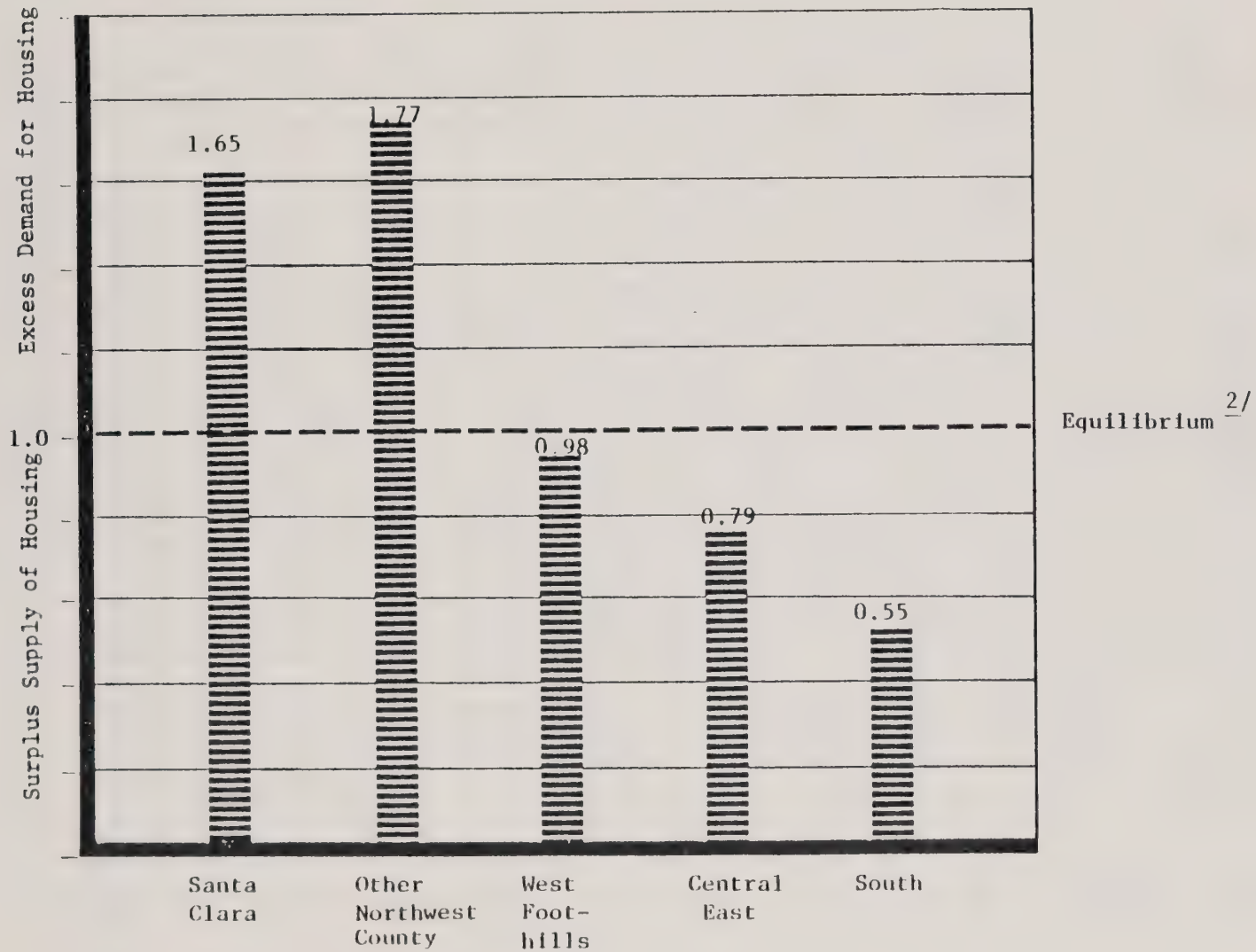
Subject Area Implications

According to the County General Plan prepared earlier this year, the housing construction has lagged behind demand due to rising construction costs, restrictive public policies, limited mortgage financing and the shrinking availability of vacant land for housing development. Most remaining land in the North County cities, including Santa Clara, is scattered in small parcels not suitable for extensive housing development. Compounded by the current imbalance between jobs and housing in Santa Clara and other North County cities (see Figure 6), the subject property looms as particularly desirable for housing development. The following factors must be seriously considered:

- The site is a major North County parcel possibly suitable for housing construction with some potential for multi-family development.
- The location may receive political support on a regional level for residential development.
- Although affordable new housing is needed in the area, the extent of housing development physically possible at the subject property would not mitigate the current shortage.

Figure 6

RATIO OF JOB GENERATED HOUSING ^{1/}
DEMAND TO AVAILABLE SUPPLY



^{1/} Employment generated housing demand divided by housing supply for workers.

^{2/} Employment equals available housing within the community.

Source: Santa Clara County Planning Department and Economics Research Associates

INDUSTRIAL AND BUSINESS OFFICE PARK DEVELOPMENT

Santa Clara County has led the Bay Area region in economic growth since the 1950s. Since this time, both population and employment expanded at over six percent annually: rates that are among the highest for major metropolitan areas in the United States.

Recent employment growth has resulted from high technology manufacturing of products with rapidly expanding demand in the United States and throughout the world. These include office machines and computing equipment; radio, television and television receiving equipment; communication equipment; electronic components and accessories, aircraft and parts; guided missiles, space vehicles and parts; and measuring and controlling instruments. Since 1972, the county's manufacturing firms notably shifted their marketing from government contracts to civilian markets. With a broader base of demand from consumer and industrial markets throughout the world, the County's economy is less vulnerable to future fluctuations in government contracts or in the domestic economy. As a result, Santa Clara's growth rate in high technology manufacturing has not been matched elsewhere in the United States.

Recent Demand For Business Park Sites

ERA recently surveyed the trend in demand and absorption for sites by all types of industrial firms and, separately, from high technology manufacturers. The territory surveyed covered the urban service area of the City of San Jose. Since much of the new activity for high technology manufacturing has occurred in this area during the last five years, the following highlights from Table I-5 are of relevance to the market potential for the Guadalupe West area, which is across the Guadalupe River from San Jose's Golden Triangle. During 1975 through 1979 in San Jose's urban service area:

Table I-5

SUMMARY OF INDUSTRIAL LAND ABSORPTION
SAN JOSE URBAN SERVICE AREA

	<u>Total</u>	<u>Estimated High Technology</u>	<u>Percent In High Technology Plants 1/</u>
A. INDUSTRIAL BUILDING PERMITS (THOUSANDS OF SQUARE FEET)			
1975	2,354	2,024	86%
1976	1,160	986	85%
1977	3,032	2,547	84%
1978	3,453	3,142	91%
1979 <u>2/</u>	5,635	5,350	95%
B. INDUSTRIAL LAND ABSORBED BY NEW BUILDING ACTIVITY (ACRES)			
1975	161	138	86%
1976	80	68	85%
1977	209	176	84%
1978	238	217	91%
1979	388	368	95%
Five-Year Annual Average	215	193	90%
Three-Year Annual Average		254	

1/ Percent distribution obtained from the 1978 Overall Economic Development Plan for San Jose.

2/ Economics Research Associates' estimate.

Source: Economics Research Associates

- Industrial building permits rose from 2.4 million square feet in 1975 to 5.6 million square feet in 1979.
- Land on industrial sites and business parks absorbed by new building activity increased from 161 acres in 1975 to 388 acres in 1979.
- Between 85 and 95 percent of this absorption of sites was found in high technology manufacturing activity. Plants and offices for high technology firms rose from 138 acres in 1975 to 368 acres in 1979 with a five-year annual average occupancy of 193 acres.

From recent data collected on major industrial parks in the South Bay Region, it appears that this activity has slowed significantly during the last 12 months. Some current problems confronting active industrial park operators include extraordinarily high interest rates for business firms concerning construction loans, increasing concerns about availability of affordable housing for labor force, and moderately increased penetration of domestic semi-conductor markets from Japanese competitors. Much publicity has also recently been given to areas like Roseville near Sacramento and out-of-state locations in Oregon, Idaho, Colorado, Arizona, and New Mexico for satellite plants.

Nevertheless, current industrial park operators and developers are optimistic that their programs will continue to be successful during the next few years. Complete absorption of existing properties is anticipated over time at higher purchase and lease prices for prepared sites and/or completed buildings. ERA believes, moreover, that major developers for high technology parks in Silicon Valley would not hesitate to bid on the rights to manage and participate in the development of acreage in the Guadalupe West area.

Recent Calculations of Supply

A recent ERA survey of finished and semi-finished sites available for high technology plants and offices in active industrial parks in the San Jose urban service area is presented in Appendix A. This survey revealed the following highlights:

- Supply of 642 acres in active industrial parks.
- An additional 745 acres anticipated for development into active industrial parks within 1980-1984.
- An additional 2,076 acres in contiguous sections of 50 or more acres with appropriate zoning and location for possible future development into industrial or business sites.

Indeed a significant amount of land is available in prime competitive locations throughout the South Bay Region for high technology manufacturing firms who need new office or plant sites. A large amount of the speculative building space will continue to enter the market as required on remaining parcels in these locations. As noted in the Appendix survey, however, no major developer now offers land for sale in these locations. The land is being held in anticipation of continued inflation.

Moreover, industrial park development activity in Milpitas and Fremont has significantly increased. Experienced developers with financial backing have acquired and are now developing sites in Milpitas and in Fremont. These urban service areas are not yet considered to be prime sites for high technology manufacturers but have lower land prices and are able to demonstrate a shorter commute time for industrial workers from the East Bay. The successful marketing program of San Jose International Business Park was based, for example, on its ability to demonstrate better accessibility to a larger labor force and to less expensive housing in southern Alameda County relative to Santa Clara County.

Recent Demand Versus Supply

As shown in Table I-6, an average annual absorption of 193 acres per year for 1975-1979 and 254 acres annually for 1977-1979 was experienced. ERA does not believe that an annual average of 250 acres per year can be sustained during the 1980s, but the recent five-year average of 193 acres would appear to be reasonable for calculating purposes. If so, the following estimates of years required to absorb available land in the San Jose urban service area still appear to be reasonable:

- 3.3 years for sites in active industrial parks.
- An additional 3.9 years for areas believed to be developed into active industrial parks by 1985.
- An additional 10.8 years to absorb land in contiguous sections of 50 or more acres.

Thus, the estimate of time required to absorb industrial and business sites for high technology firms in neighboring San Jose's urban service area varies with the definition of supply. Only 3.3 years of supply is "on the shelf" in active parks, but an additional 3.9 years of product is anticipated by 1985 and enough land exists in adequate condition for an additional decade of absorption.

The marketability of land at Guadalupe West for high technology manufacturing and related firms also must take into account the increasing competitive position of Milpitas and Fremont. With lower land prices, somewhat superior accessibility to future blue-collar workers and technicians in areas of affordable housing, and "pro growth" attitudes in current city councils, Milpitas and Fremont represent prime competitive factors. However, Guadalupe West is more centrally located from the perspective of high technology industries.

Table I-6

ESTIMATE OF TIME REQUIRED TO ABSORB
HIGH TECHNOLOGY INDUSTRIAL LAND IN SAN JOSE

	<u>Supply (Acres)</u>	<u>Average Annual Absorption 2/</u>	<u>Estimated Years To Absorb</u>
Active Industrial Parks (Finished and Semi-Finished Sites) For High Technology Tenants	642	193-254	2.5- 3.3
Areas to be Developed into Active Industrial Parks Within the Next Five Years	745	193-254	2.9- 3.9
All ^{1/} Land in Contiguous Section of:			
(A) 50 or more acres	2,076	193-254	8.2-10.8
(B) 30 or more acres	2,0568	193-254	10.1-13.3

1/ Includes active parks, areas to become active in next five years,
plus other sites evaluated as suitable for high technology tenants.

2/ The lower absorption number represents an average of 1975-1979, while
the higher figure is an average of the past three years, 1977-1979.

Source: Economics Research Associates

Subject Site Implications

The Guadalupe West area in Santa Clara has many advantages to enable successful competition with existing and new business or industrial parks for high technology manufacturing during the 1980s. Guadalupe West has excellent visibility to firms in this area needing new business sites. In addition, the environmental quality and access of the location are excellent. Above all, the strategic centrality of the subject site would attract firms seeking expansion of administrative and research/development offices in the South Bay Region while relocating their production and marketing functions to other locations throughout the West.

ERA believes that a market plan for this site as a "headquarters location" is especially important because Silicon Valley will become somewhat less competitive with other locations throughout the West for production plants.

In planning the Guadalupe West site for alternative land uses, it is also important to keep in mind that the cities of Fremont and Milpitas, as well as existing sites in the San Jose urban service area, will be very competitive for those firms who decide to locate additional plants or functional office/distribution space in Silicon Valley. Despite escalating housing costs which have made shelter unaffordable for many blue-collar workers, some firms will continue to expand only in Silicon Valley because they have not yet reached the size where they can set up a satellite plant. Many of these firms, however, will find Milpitas, Fremont, and most portions of San Jose's "Golden Triangle" preferable due to affordable land prices and superior access to operative and service workers in the East Bay.

ERA concludes that a high technology business park of the highest environmental quality is appropriate for 150 to 250 acres at the subject site. The park should be designed to accommodate administrative and

research development functions rather than production, marketing, or distribution functions. If an interior setting can be created similar to Stanford Industrial Park, San Tomas Business Park, or Vallco Park, Guadelupe West could become a premier location for headquarters of high technology firms in Silicon Valley during the 1980s.

ERA recommends that such a site be developed, however, only if two additional concerns can be resolved:

- The need for improved mass transit by bus and/or light rail service is very important: traffic congestion has reached very peak proportions in the vicinity from 7 AM to 9:30 AM and from 3:30 PM to 6 PM. To help mitigate the dilemma, mass transit should be developed although ridership gains may be limited. A transit solution, perhaps in conjunction with the planning for Guadelupe Corridor, would enhance the market potential and the environmental quality for the City of Santa Clara and participating industrial park developers at Guadelupe West. ERA also anticipates that transit planning might provide for linkages with the Southern Pacific Railroad, which plans rail service expansion on its existing line under contract to Caltrans. Adequate parking must also be provided. In addition to the transportation concerns raised with industrial development as well as other potential uses, sewage requirements must be examined. With existing systems now operating at peak capacity, waste management must be planned for with any development at Guadelupe West.
- Creation of additional housing for office workers is also critical. ERA believes that from the marketability standpoint alone, it would be advisable to develop townhouses, condominiums and/or multiple rental housing in significant amount elsewhere on the Guadelupe West site if a high technology

business park is developed. Even though the park will not be a production center in the traditional sense, it will employ a larger number of office workers with moderate incomes. They will not be able to afford Santa Clara's escalating housing prices any more than most of the blue-collar workers who are now experiencing such difficulty in the area. Thus, ERA recommends that if the City of Santa Clara proceeds with plans to create a major new business park, then adequate housing should also be developed, might be required elsewhere in Guadalupe West.

If Guadalupe West has buildings which include assembly functions, ERA would anticipate density of 80 employees per acre. This assumes an average ratio of 20,000 square feet of building space per acre and roughly 250 gross square feet of floor space per employee. As a result, housing demand would be compounded. The City currently notes a density of 70 to 150 employees per acre for industrial space in Santa Clara.

ERA contacted representatives with Stanford Industrial Park in Palo Alto. They estimated that 640 acres are occupied with 26,000 employees. This average of about 40 employees per acre would be the approximate density for a research and development "campus" type of business park at Guadalupe West. Compared to related types of electronics activity this level and scale of development is considered quite appropriate for the Guadalupe West site.

RETAIL

The scale and orientation of retail development at Guadalupe West primarily depends on the other types of development pursued onsite. Creating an independent retail anchor, i.e., a regional shopping center, does not appear feasible given the proliferation of regional centers in the South Bay Area.

Within seven miles of downtown San Jose, for example, are eight major centers providing over five million square feet of highly competitive retail space and \$500 million in retail sales (see Table I-7). In addition, the Sunnyvale TownCenter siphons activity north of the site. When the freestanding Sears at Meridian and San Carlos are added, the area is ringed by over 18 major department stores which average 195,000 square feet each as shown in Table I-8. A number of smaller department stores, such as Gold Circle, K-Mart, The Treasury, Best, and Gemco, are also in this market area. Consequently, regional shopping activity is quite competitive. Given this saturated market place and a lack of population east of Highway 101 south from Palo Alto to the subject site, the market potential for regional shopping at Guadalupe West is not strong.

Thus, the nature of commercial retail at Guadalupe West depends on the type and phasing of development planned. If housing and industrial/office parks are developed, then small scale, project-oriented retail and support services would emerge. This would perhaps include a neighborhood shopping center of 40,000 to 70,000 square feet or more with a supermarket anchor and related shops and services oriented to residents in the immediate area. Although the current supply of neighborhood convenience shops appear inadequate, new retail development cannot be supported unless additional housing and employment is established in the area. Office workers would support an adjacent center of perhaps 20,000 to 40,000 square feet comprised of several restaurants, retail and services, perhaps including a bank, travel agent, drug store, dry cleaners and the like.

With the development of a convention center and sports arena, the opportunity for additional and more specialized retail exists. As more visitors would be attracted to the subject area, a themed specialty center of at least 50,000 to 100,000 square feet may be feasible--gaining market strength as hotels are concurrently developed within the project area.

Table I-7

PERFORMANCE OF REGIONAL SHOPPING CENTERS
WITHIN SEVEN MILES OF SAN JOSE CBD IN 1979

	<u>Center Size Retail Stores</u>	<u>Department Stores</u>		<u>Center Retail Store Sales (\$1,000)</u>	<u>Center Sales Per Square Foot</u>
		<u>Number</u>	<u>Square Footage</u>		
Capitol Square	250,894	1	159,000	\$ 22,000 ^{1/}	\$ 87.69
Eastridge	1,377,010	4	905,700	131,543	95.53
Oakridge Mall	739,906	4	628,000	66,194	89.46
Almaden Fashion Plaza	361,926	1	215,300	23,388	64.62
Valley Fair	524,394	1	239,000	56,229	107.22
Stevens Creek Plaza	361,064	1	234,000	35,223	97.55
Westgate	598,719	2	326,840	54,974	91.82
Valico Fashion Park	<u>934,407</u>	<u>3</u>	<u>663,556</u>	<u>106,644</u>	<u>114.13</u>
Total	5,146,320	17	3,215,396	\$496,195	\$ 96.42

^{1/} Estimated by Economics Research Associates based on available data.

Source: San Jose Mercury News, Marketing Services Department, and Economics Research Associates

Table I-8

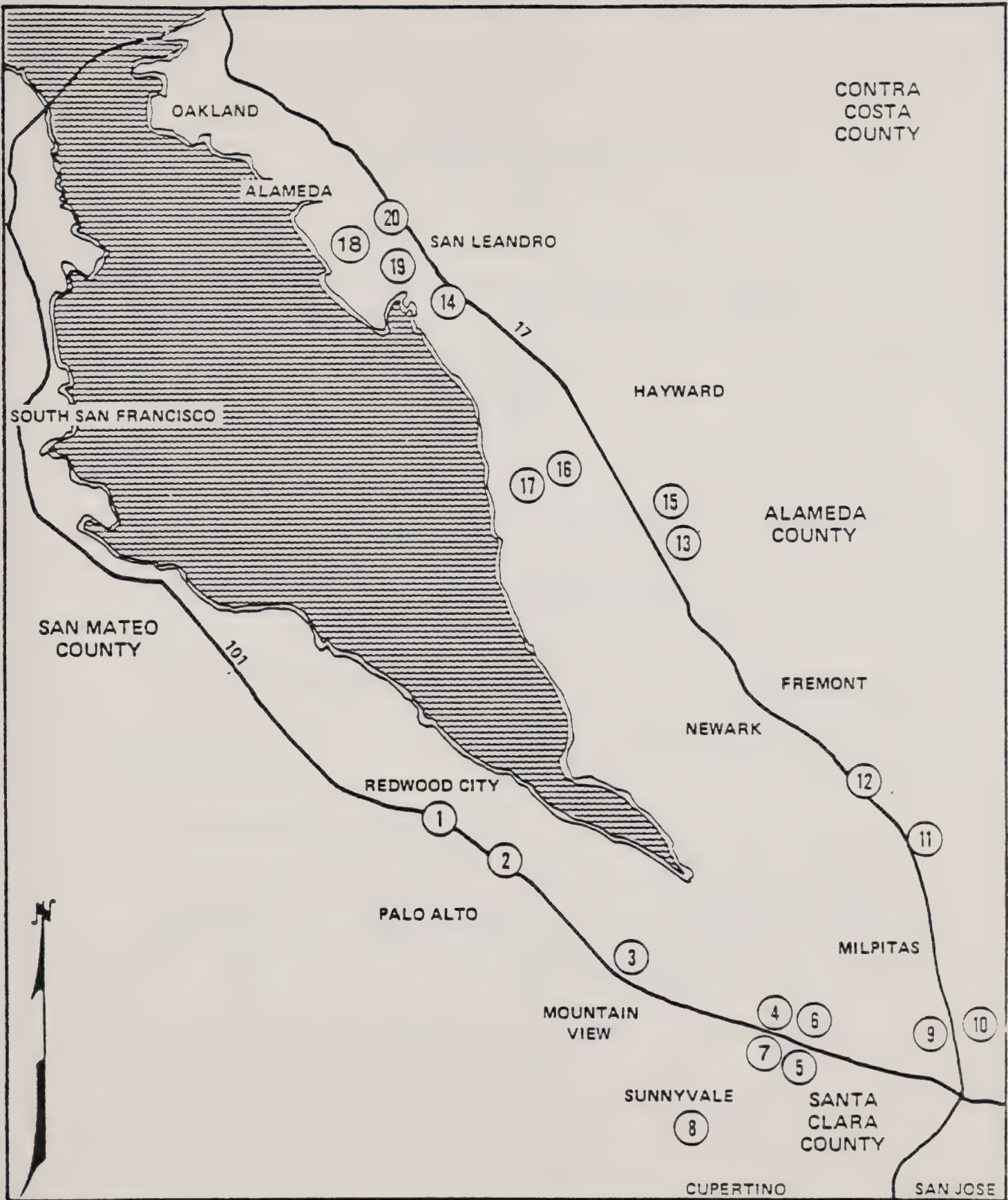
DEPARTMENT STORES LOCATED IN
SAN JOSE MARKET AREA SHOPPING CENTERS
WITHIN SEVEN MILES OF SAN JOSE CBD

<u>Capitol Square</u>	<u>Square Footage</u>
Montgomery Ward	159,000
<u>Eastridge</u>	
The Emporium	170,800
Macy's	174,900
JC Penney	270,000
Sears	290,000
<u>Oakridge Mall</u>	
Montgomery Ward	156,000
Bullock	150,000
Macy's	166,000
Wards	156,000
<u>Almaden Fashion Plaza</u>	
The Emporium	215,300
<u>Valley Fair</u>	
Macy's	239,000
<u>Stevens Creek Plaza</u>	
The Emporium	234,000
<u>Westgate</u>	
JC Penney	159,840
Montgomery Ward	167,000
<u>Vallco Fashion Park</u>	
Bullock	170,662
JC Penney	219,738
Sears	273,156
<u>Free-standing Sears</u>	<u>138,000</u>
Total 18 Stores	3,509,400
Average Department Store Size	195,000

Source: Economics Research Associates

In summary, the type and scale of retail development hinges on the other land uses pursued. Although retail would not serve as a project anchor, i.e., be the primary visitor draw for the area, it would contribute to the overall visitor experience and also serve the needs of on site residents and workers.

APPENDIX A



INDUSTRIAL PARKS: CENTRAL AND SOUTH BAY

SURVEY OF MAJOR INDUSTRIAL PARKS
SOUTH BAY REGION

280

Park Name/Location	Bohannon Industrial Park/Menlo Park (1)
Acreage	
Total	200
Available	31
Building Space	
Vacancies	0
Planned	2 spec buildings and build to suit
Purchase Price of Land	Not selling land
Current Lease Rates (c/sq.ft./month)	30c-35c for warehouse shell
Build to Suit	Yes
Types of Activities	Distribution, light manufacturing, R&D office
Absorption Information	1975-1979 leased out 60,000 square feet per year

(Continued)

Park Name/Location	Menlo Industrial Park/Menlo Park (2)
Acreage	
Total	62
Available	25
Building Space	
Vacancies	37,640 warehouse 190,000 low-end office
Planned	230,000 warehouse 210,000 R&D office
Purchase Price of Land	Not selling land
Current Lease Rates (c/sq.ft./month)	28¢ industrial gross plus 10% office allowances
Build to Suit	Yes
Types of Activities	Distribution, light manufacturing
Absorption Information	4 warehouse leases initiated in last 3-4 months (190,500 sq.ft.)

(Continued)

Park Name/Location	Shoreline Business Park/Mountain View (3)
Acreage	
Total	80
Available	30
Building Space	
Vacancies	40,000
Available	200,000
Purchase Price of Land	Not selling land
Current Lease Rates (¢/sq.ft./month)	
Distribution	30¢
Office, R&D	40¢-45¢
Build to Suit	Yes
Types of Activities	Light manufacturing, office; some distribution
Absorption Information	50,000-75,000 per year

(Continued)

Park Name/Location	Moffet Industrial Park/Sunnyvale (4)
Acreage	
Total	519.5
Available	40
Building Space	
Vacancies	240,000 (12 buildings ranging from 22,000 to 81,000
Planned	275,000
Purchase Price of Land	Not selling land
Current Lease Rates (c/sq.ft./month)	
Warehouse	24c
Office, R&D	49c
Build to Suit	Yes
Types of Activities	R&D, light manufacturing, warehouse- distribution, office
Absorption Information	
1978	450,000
1979	500,000

(Continued)

Park Name/Location Oakmead Village/Santa Clara and Sunnyvale (5)

Acreage

Total 420

Available 40

Building Space

Vacancies 4 new R&D-office buildings--23,000 +
43,000 + 30,000 + 70,000 = 166,000

Planned 500,000

Purchase Price of Land Not selling land

Current Lease Rates
(¢/sq.ft./month)

For fully serviced R&D office building
\$1.35-\$1.45 (full service)

Build to Suit No, spec building only

Types of Activities R&D office, light manufacturing

Absorption Information

Acreage Sold/Leased			
<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
240	280	320	400

(Continued)

Park Name/Location	Marriott Business Park/Santa Clara (6)
Total	
Acreage	310
Available	0
Building Space	
Vacancies	35,000 of 2-story R&D office building
Planned	More low-rise R&D office by other developer
Purchase Price of Land	Park sold out (60% - developers) (40% - tenants)
Current Lease Rates (¢/sq.ft./month)	New R&D office buildings 60¢-65¢
Build to Suit	Yes
Types of Activities	R&D light manufacturing
Absorption Information	All 310 acres sold or optioned 25 months after park's opening in 1976

(Continued)

Park Name/Location	San Tomas Business Park/Santa Clara (7)
Acreage	
Total	375
Available	10,000 sq.ft. for build to suit
Building Space	
Vacancies	93% occupancy
Planned	N.A.
Purchase Price of Land	Park sold out in 1974
Current Lease Rates (¢/sq.ft./month)	40¢ average
Build to Suit	Yes
Types of Activities	Light manufacturing/assembly some business offices
Absorption Information	Sold out in 1974

(Continued)

Park Name/Location	Vallco Park/Santa Clara (8)
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Acreage

Total	380
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Available	45
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Building Space

Vacancies	0
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Planned	212,000
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Purchase Price of Land	Not selling land
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Current Lease Rates (¢/sq.ft./month)	Not recently active
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Build to Suit	Yes
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Types of Activities	R&D office, assembly
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Absorption Information	Not recently active
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(Continued)

Park Name/Location	Oak Creek Business Park/Milpitas (9)
Acreage	
Total	275
Available	275 (can expand to 600 acres)
Building Space	
Vacancies	3,200,000
Planned	444,000 under construction
Purchase Price of Land	Not selling land
Current Lease Rates (¢/sq.ft./month)	Warehouse shell, R&D office
Build to Suit	Yes (3-5 acre parcels)
Types of Activities	Anticipating, distribution, assembly, R&D office
Absorption Information	Opened March 1980

(Continued)

Park Name/Location	International Business Park/San Jose (10)
Acreage	
Total	375
Available	4 parcels for sale, remaining IBF land build to suit
Building Space	
Vacancies	5,000
Planned	700,000
Purchase Price of Land	\$5.25-\$5.74 per sq.ft.
Current Lease Rates (¢/sq.ft./month)	50¢-60¢
Build to Suit	Yes
Types of Activities	High technology manufacturing, office distribution
Absorption Information	All 26 escrows completed in 1978. Sales inactive in 1979.

(Continued)

Park Name/Location	Sutter Hill/Crocker-Fremont (11) Fremont
Acreage	
Total	148
Available	98 now being <u>im</u> proved for spec, build to suit, sales
Building Space	
Vacancies	0
Planned	N.A.
Purchase Price of Land	When land goes on market later in year \$3.50-\$5.00
Current Lease Rates (c/sq.ft./month)	N.A.
Build to Suit	Yes
Types of Activities	Light manufacturing, distribution
Absorption Information	Just starting

(Continued)

Park Name/Location	Dunwoody & Caz/Fremont (12)
Acreage	
Total	57
Available	57 holding land
Building Space	
Vacancies	0
Planned	0
Purchase Price of Land	Inactive
Current Lease Rates (¢/sq.ft./month)	None yet
Build to Suit	Yes
Types of Activities	Light manufacturing, distribution
Absorption Information	Just starting

(Continued)

Park Name/Location	Sutter Hill-Crocker South/Hayward (13)
Acreage	
Total	47
Available	15 to be sold, 28.5 build to suit
Building Space	
Vacancies	0
Planned	N.A.
Purchase Price of Land	\$3.00
Current Lease Rates (¢/sq.ft./month)	N.A.
Build to Suit	Yes
Types of Activities	Warehouse distribution
Absorption Information	First tenant--Duracell, March 1980

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·

(Continued)

Park Name/Location	Marina Business Park/San Leandro (14)
Acreage	
Total	15
Available	7
Building Space	
Vacancies	52,000
Planned	N.A.
Purchase Price of Land	Not selling land
Current Lease Rates (¢/sq.ft./month)	For warehouse with some office space 29¢-35¢
Build to Suit	N.A.
Types of Activities	Warehouse distribution, small amount of office
Absorption Information	N.A.

(Continued)

Park Name/Location	Huntwood Business Center/Hayward (15)
Acreage	
Total	8
Available	0
Building Space	
Vacancies	12,700 warehouse with some office space
Planned	0
Purchase Price of Land	Park completely developed, March 1980
Current Lease Rates (¢/sq.ft./month)	23¢ industrial gross
Build to Suit	No
Types of Activities	Office, light manufacturing
Absorption Information	79,300 sq.ft. leased over past five months

(Continued)

Park Name/Location	Eden Plaza Business Center/Hayward (16)
Acreage	
Total	11
Available	0
Building Space	
Vacancies	4,168 office, 4,944 warehouse with some office space
Planned	0
Purchase Price of Land	Park completely developed
Current Lease Rates (¢/sq.ft./month)	72¢ industrial gross for office 45¢ industrial gross for warehouse- office
Build to Suit	No
Types of Activities	Office, light manufacturing
Absorption Information	N.A.

(Continued)

Park Name/Location	Point Eden Business Park/Hayward (17)
Acreage	
Total	39
Available	Park has not opened
Building Space	
Planned	Three office-assembly buildings by early 1981
Purchase Price of Land	Not selling land
Current Lease Rates (¢/sq.ft./month)	N.A.
Build to Suit	Yes
Types of Activities	Office, assembly, some commercial
Absorption Information	N.A.

(Continued)

Park Name/Location	Edes Industrial Park/Oakland (18)
Acreage	
Total	5
Available	3
Building Space	
Vacancies	0
Planned	16 office units totaling 70,000
Purchase Price of Land	Will sell buildings at \$45 to \$48 per square foot
Current Lease Rates (¢/sq.ft./month)	35¢-40¢
Build to Suit	No
Types of Activities	Office
Absorption Information	Anticipate three-fourths of space leased and/or sold within one year

(Continued)

Park Name/Location	Dunn Airport Business Park/Oakland (19)
Acreage	
Total	12
Available	Park sold out
Building Space	
Vacancies	0
Planned	17 warehouse-office units totaling 199,650
Purchase Price of Land	Buildings sold at \$45 to \$51.50 per square foot
Current Lease Rates (¢/sq.ft./month)	31¢-41¢
Build to Suit	No
Types of Activities	Office, light manufacturing
Absorption Information	All space sold to units before construction began

:

(Concluded)

Park Name/Location	Oakland Airport Business Park/Oakland (20)
Acreage	
Total	300
Available	30
Building Space	
Vacancies	35,000 to 40,000 fully serviced office
Planned	N.A.
Purchase Price of Land	Not selling land. Land leases available
Current Lease Rates (¢/sq.ft./month)	\$.85-\$1,000 fully serviced office
Build to Suit	No
Types of Activities	Office, some warehousing
Absorption Information	N.A.

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